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Rockland Books, Summer '93.

A

# Medical Handbook

FOR

*Missionaries in Cold Climates.*

BY

J. H. ROMIG, M. D.

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1904.

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1904.

TO

THE MEMORY OF

MARGARET (RICKSECKER) ROMIG

THIS TREATISE IS

AFFECTIONATELY DEDICATED

BY HER SON,

(REV.) J. H. ROMIG, M. D.,

MEDICAL MISSIONARY

FOR THE

MORAVIAN CHURCH

IN

ALASKA, U. S. A.

# PREFACE.

The demand for medical literature is so well supplied that we would hesitate before offering the public any contribution were it not that a peculiar need prompts the preparation of this small treatise. Missionaries laboring in foreign fields often find the texts prepared for the use of the general practitioner too lengthy and difficult of understanding, and are bewildered by the multitude of difficult words, when medical works are consulted.

With a hope to supply a need, existing especially in missions in Alaska, the treatise thus produced is intended for the use of missionaries where medical attendants are not to be secured, because of the isolated locations of many missions.

We are indebted to the following authors, whose works have furnished valuable suggestions in the preparation of this treatise: Drs. Rotch, Johnson, Goodno, Osler, Dewey, Stevens, Van Harlingen, and especially to Dr. H. S. Weaver, for valuable assistance on the therapeutics of nose and throat affections.

This treatise is submitted with a hope that the years of experience we have had in treating the diseases prevalent in Alaska may make the work of service to those in such climates.

J. H. ROMIG, M. D.

*Bethlehem, Pa., March, 1904.*

## DOSE AND INDICATIONS FOR DRUGS.

### DOSE FOR A CHILD.

"Young's rule:" Use the age of the child as the numerator of a fraction and the age of the child plus 12 as the denominator, reduce the fraction and you have the dose for a child.

*Example.*

$\frac{\text{Child—2 years}}{\text{2 years}+12} = \frac{2}{14}$ or $\frac{1}{7}$ the dose of an adult.

Children are much more susceptible to opiates than an adult and the dose of opiates should be only one-half as much as this rule indicates. Children require larger doses of cathartics than this rule indicates, usually double the amount of cathartics should be given. The Homœopathic dosage cannot be given by this rule, but a little study will enable anyone to so modify the dose as to get the best results.

The mark $\theta$ indicates the tincture of the drug or strongest preparation.

1x indicates $^1/_{10}$ as much drug as is found in the $\theta$.

2x is $^1/_{10}$ as strong as the 1x.

The larger the number in front of the x the weaker the preparation.

The stronger preparations are best used for acute affections and the weaker preparations

for chronic diseases, where the drug is given daily for a long period of time.

Of the many symptoms given indicating a Homœopathic drug there should be present at least three well defined symptoms before the drug is selected as a remedy. Do not think all the symptoms are necessary, but look for three or more prominent symptoms in selecting the remedy.

## ABSCESS.

Abscesses are circumscribed areas filled with pus. There are two varieties, the acute and the cold abscess.

*The symptoms* of an acute abscess are pain, swelling, chill and fever. The acute abscess is filled with the ordinary pus germ. The location may be in any part of the body. An abscess works toward the surface of the body or in the line of least resistance, which is usually outward, but not always so. Deep abscesses of the neck or along the course of a muscle may burrow for some distance and rupture on the surface at a remote locality from the seat of a pus formation. An abscess always destroys tissue to a greater or less extent, and if allowed to take its own course will usually rupture spontaneously and discharge a thick, creamy pus and shreds of sloughed tissue.

The treatment of an acute abscess is for the greater part surgical.

When an abscess is expected to form, at times it may be dispelled by painting the part with Tr. Belladonna, and giving internally Ferrum phos. 2x, one tablet every 3 hours. Or giving Hepar sulphur 4x, one tablet three times a day.

When the medical measures fail, which they will usually do, there remains but one thing to

be done, and that is to hasten the formation of pus and its liberation. Best accomplished by giving Hepar sulphur 1x, one tablet every two or three hours. Applying warm poultices to the point where it is desired or expected that the abscess will break or be opened. Some drawing ointment as boil salve may be used to hasten the formation of a head or pointing spot in the abscess. When once the pus can be clearly located much pain and scarring may be prevented by lancing the abscess and thoroughly cleansing the cavity. Carbuncle cavities should be cleansed and cauterized.

### COLD ABSCESS.

Glands and joints are often the seat of abscess formation of a tubercular or scrofulous nature. The real cause, however, is the presence of the tubercle bacilli. Abscesses formed in this way and caused by this particular germ are slow in growth and attended with few systematic disturbances. Pain, chill and fever are either absent or very mild. Because of the nature of the abscess and the few symptoms produced the name of cold abscess has been given.

All cold abscesses are apt to rupture in time, and after rupturing the abscess cavity is apt to become infected with the ordinary pus germs, which, when they enter the cavity, set up all the symptoms, for the time, of acute infection or acute abscess.

The treatment of cold abscess is that of incision before the time of rupture, using the most rigid precaution to prevent infection. Drain the cavity of pus and sloughing tissue and pack with iodoform gauze to stimulate rapid granulation or healing of the cavity.

## AMPUTATIONS.

The conditions calling for amputation are so varied that an exact rule cannot be given. Where from injury the circulation to any part has become injured to such an extent as to make the life of the part impossible, then amputation is at once the wisest thing.

Where gangrene or blood poison threatens the life of the individual from poison from a given locality, and the poison cannot be removed, there remains but one thing to do, and that is to remove the poisoned extremity.

After frost bites, if the bone has been frozen and amputation has become necessary, always go well above the line of demarkation for the point of severing the bone, for bones regain their vitality very poorly after a frost bite, and if the amputation is not performed well above the line of demarkation on the surface it will become necessary later to open the wound and remove more of the bone.

Before operating always cleanse the seat of

the operation well and cover the part to be removed with a wet dressing of Bichloride of Mercury. See to it that no poison remains on the surface that is to be operated upon, or that none be carried from other sources into the new wound. Bathe the part to be operated upon in Bichloride of Mercury solution and keep the part to be removed covered with an antiseptic dressing. Finally, the hands of the operator and his assistants must be thoroughly scrubbed and soaked in the 1-1000 solution of Bichloride of Mercury. The instruments and thread must have been boiled for at least fifteen minutes to insure their carrying no germs that will poison the wound. The success of the operation depends on the detail of cleanliness observed and no one should be careless.

### AMPUTATION OF A FINGER OR TOE.

All the preparatory steps having been taken, of cleanliness, and of disinfection, tie firmly some cord or preferably a narrow bandage around the toe or finger back of the locality to be operated on, to control the circulation. Remember the arteries of the fingers and toes are to the side and not above or below the finger. Bend the finger or toe at the joint to be severed. Cut across the back one-half inch in front of the flexed joint. Press the skin back and then cut through the joint. Follow the under surface of the bone for nearly an inch and then cut through to the palmar surface.

Pick up and tie any spurting arteries. Loosen the cord or bandage that has been tied around the finger or toe. Scratch the end of the joint a little with the knife so that the joint surface may enter into the healing. Bring up the flap from below and sew it over the end of the joint to the tissues and skin above. It is desired that the flap of skin come from below as the palmar surface is less sensitive and affords a better cushion for the end of the bone and is better supplied with the nerves of touch than would be a dorsal flap.

Cleanse and dress the wound when necessary.

### AMPUTATIONS AT THE HAND OR FOOT.

The preliminary steps for the operation should be performed as for the removal of a toe or finger at the joint. A tourniquet may be used on the leg to control the bleeding or the spurting artery may be picked up with an artery clip as soon as divided. Begin the incision one-half inch back of the joint and cut on the back or dorsal surface to a point one inch below the joint. Encircle the finger or toe, cutting everything to the bone. Dissect back all the tissues to the joint and remove the bone at the joint. Scarify the end of the joint. Tie the spurting arteries. Bring the flaps together and sew, making the line of union up and down over the end of the bone. Dress and care for as occasion may demand.

## AMPUTATIONS OF A LEG OR ARM.

Amputations of a leg or arm can be done by anyone who will keep his head cool and remember the following points:

Before operating, see that the location to be operated upon has been cleansed and rendered thoroughly aseptic.

Apply a rubber band tourniquet to the limb above the seat of operation.

Remember that all the large arteries are to be found in the protected sides of the limbs.

Make the flaps from both sides horizontal or vertical as will best cover the end of the bone, with a soft cushion of tissue.

Cut the bone far enough back of the flesh to make no difficulty in covering the end of the bone.

Tie all the bleeding arteries firmly. Then remove the tourniquet and tie any that may throb or spurt.

Sew the flaps together evenly, but do not make the stitches too tight.

Dress firmly and renew the dressing as occasion may demand.

If the wound should open up, remove with very gentle traction any stitches that must come away.

If bleeding should occur after the operation that firm pressure cannot control, it may be necessary to open up the wound and tie the artery that is bleeding.

If the wound should open during the time of healing, keep the edges of the flaps in as close proximity as possible by bands of adhesive plaster.

## ASPHYXIA AND ARTIFICIAL RESPIRATION.

Artificial respiration or breathing is called for in drowning cases, for persons choking from ether, or accident where the breathing has ceased and the heart still beats. In drowning cases the heart may beat so feebly as not to be easily heard and yet recovery may follow diligent effort to resuscitate.

If drowning has occurred, stand over the patient and catch the arms around the body just below the ribs. Raise the body partially from the ground with the face down. Have some one open the mouth and draw down the tongue. When the water has run out of the lungs place the body on the back with the head lowered slightly. Have some one hold the lower jaw up and open as in giving ether. Then grasp the arms at the elbow and carry the arms outward and upward until they almost meet over the head. Bring the arms down to the side and make firm pressure on the chest. Repeat the movements of the arms not more than eighteen times a minute. Most persons get in a hurry and work too fast.

Rub the legs and arms towards the heart. Dash hot or cold water on the chest. Slip a piece of ice into the rectum or forcibly dilate the rectum with the fingers or a dilator.

The last two procedures are of especial value where there is a cessation from breathing, due to taking ether.

Do not give up the efforts too soon.

Give hypodermic injections of brandy or Strychnine as soon as the circulation can take it up, in drowning cases; or at once, if there is any apparent circulation, as in asphyxia from ether.

## BURNS.

Burns, Scalds and Superficial Frost Bites all demand about the same treatment. A burn may be only such as to redden the skin; or more intense and cause blistering; so severe as to destroy the superficial tissues. A simple reddening of two-thirds of the body is very apt to cause death. Blistering of one-third of the body is very serious and usually fatal. Deep burns of small areas may prove fatal to children or the enfeebled.

The scars of burns contract after healing and horrible distortion may result. Infection of burned areas may occur and death result from blood poison. Waste matter that should

be eliminated by the skin may be forced upon the lungs, kidneys and intestines and cause serious complication to the recovery.

TREATMENT.—For slight burns where there is reddening of the tissue or blistering, nothing relieves the pain so much as a saturated solution of Baking Soda (as much Soda as the water will take up). Large blisters should be punctured with a needle, but do not remove the skin, as the air causes intense pain when it comes in contact with the exposed nerves. Superficial burns are the most painful and require a dressing that will exclude the air. Carbolized vaseline is a very good dressing spread on lint.

Antiseptic dressings are to be used with caution lest from so great a surface enough of the drug may be absorbed as to produce poisoning. Plain boiled water or Boric acid solution is to be preferred. Remove all sloughs and keep the dressings renewed lest blood-poison result from the absorption of pus. Keep the limbs extended or in a little more than the angle desired after healing, for there will likely be contraction that is very hard to overcome and had better be prevented.

## BRUISES.

Bruises are injuries of the tissues beneath the skin. Usually produced by a fall or blow from some blunt instrument. There is more or less effusion of blood into the tissues, with heat, pain and swelling. If the injury is a deep one the discoloration will be slow in reaching the surface, if shallow or in soft tissue, such as the eye, discoloration or ecchymosis soon follows.

TREATMENT.—There has been an injury to the bloodvessels beneath the surface and bleeding is in progress. The object of first import is to stop the bleeding, which is best accomplished by firm bandaging, by cold compresses or very hot applications, and by astringent lotions, such as Leadwater and Laudanum. Later there is much benefit derived from the use of soothing lotions, of which Tr. Arnica and water in equal parts is the most frequently employed. Arnica should not be used if the skin has been broken, as it has been known to cause erysipelas when used on open surfaces. The Fluid Extract of Hamamelis is to be preferred where the skin has been injured. Apply the Arnica or Hamamelis with gentle friction or on wet compresses.

When once the bleeding has ceased and absorption has begun hot applications and gentle

massage or rubbing will aid much in dispelling the blood from the tissues and hastening the disappearance of the color, which is often the most urgent part of the treatment.

## BOILS.

Boils are caused by microbic infection of the deeper structures, resulting in one or many circumscribed painful areas or localized spots of inflammation. The microbe travels down the canal of a hair or through the opening of a sweat gland and first produces a circumscribed, painful area, later a small pustule and finally enters the deeper structures of the skin and connective tissue. As a result of the inflammation a central core perishes and is sloughed away.

A boil may be of the blind variety, where there is only pain and swelling, but true pus formation does not occur. The common form of boils goes on to the formation of pus, and opens with the discharge of pus and the sloughing away of a central core. A boil runs its course in a week or ten days. There may be successive crops of boils, but each one is independent of the other. Unhealthy conditions of the skin and impurities of the blood, as well as the change of seasons and overwork or exhaustion, all predispose to the formation of boils. The neck and back, the

face and margins of the scalp and ears, and the axilla and groin and perineum are all favorite localities for the development of boils.

TREATMENT.—When there is simply pain and swelling a threatened boil may be prevented by pulling out the hair in the centre of the inflamed area and painting the part first with a very strong solution of Carbolic acid, and later with the Fl. Ext. of Belladonna. When once an abscess has formed hot applications, such as poultices, will hasten the heading or opening of the boil. Boil salve may be applied to soften the tissues and draw or hasten the heading of the abscess. Incision and drainage would be the ideal measures, but most persons prefer to allow the boil to open and discharge, after which rapid healing follows.

## BLOOD SPITTING.

The causes of blood spitting may be direct injury to the mouth, throat or lungs. Inflammatory affections of the respiratory system. Obstruction to the venous circulation, as is common in heart and liver diseases. In scurvy, in consumption of the lungs, where the destructive process causes some artery-wall to break down, and in kidney diseases, where the general blood pressure is raised to such an ex-

tent that the arteries of the lungs may rupture from high arterial tension.

SYMPTOMS.—Usually a slight cough, a warm sensation beneath the breast bone, followed by a warm, salty fluid in the mouth. Sometimes the presence of the blood in the mouth is the first symptom the patient has. The blood is generally raised by coughing and is bright red and frothy, and is intimately mixed with air and mucus. Associated with this may be heard rales or a bubbling in the region of the chest from which the blood comes. Blood from the stomach is always dark in color and is clotted and not mixed with air and mucus, but is mixed with food.

TREATMENT.—Absolute rest of mind and body is necessary. For adults give a teaspoonful dose of a strong salt solution, often repeated, and have the patient rest in bed, or give 10 to 15 drops of the Tr. of Arnica, or ¼ to 1 teaspoonful of the Fluid Extract of Hamamelis, every 20 to 30 minutes, until the blood spitting is better. For adults who are well and strong:

℞. Morphine sulphate, .....¼ gr.
Atropine sulphate, .....$^1/_{100}$ gr.

If the patient is weak give about one-half of this dose and repeat in three or four hours, if necessary.

## NORMAL BREATHING.

The normal breathing of infants is about thirty-five per minute for the first year, twenty-five for the second year, about twenty at the fourteenth year, and eighteen per minute for adult respiration. Age, sex, excitement, work, and disease all modify the number of respirations per minute. Febrile and nervous disorders tend to increase the number of breaths in the minute. In fainting and brain injuries and depressed nervous conditions the respiration is slowed.

## BED-WETTING OR ENURESIS.

Bed-wetting is more a symptom than a disease. There is always the nervous condition of the patient to be taken into consideration. The mechanism of micturition is a complicated one, and only under the control of the will after the child has reached an age and period where the inhibitory centers hold in abeyance the reflex nerve action. Punishing a child for bed-wetting or for the involuntary discharge of urine is, as a rule, cruel and ignorant practice. The reflex nerve fibers governing the muscular walls of the neck of the bladder

respond to the irritation caused by distension of the bladder. The reflex irritation travels up to the inhibitory centers in the back where the impulse to relax the sphincter of the bladder and expel the contents is stimulated. In early childhood the emptying of the bladder is accomplished by the reflex and inhibitory nerves and the act requires little or no work on the part of the will.

About the second year in life the will is brought into play and the child assumes control of the function. Some children may be subject to periodical attacks of enuresis. Some are troubled only at night when the sleep is so sound that they lose control of the mechanism of the bladder.

Hyperacidity of the urine or anything that will irritate the bladder may cause bed-wetting. Pin-worms either of the rectum or after traveling into the genital tract, as is often the case with girls, may, by their irritant action in the rectum or genitals, cause irritability of the bladder and involuntary urination.

A tight and adherent prepuce may excite the reflex nerves so as to be the cause of enuresis. When this is the case circumcision will very likely relieve the nervous irritation and cure the enuresis. Remember that, during childhood, there is a lack of development of the inhibitory centers, and that the will has not the control of the bladder as is re-

quired in after life. We hope, if nothing more, to ask mothers to remember the child is undeveloped and punishing is a cruelty in many instances.

TREATMENT.—There is little use to give drugs when the cause is to be found in the rectum or genital tract. If pin-worms exist treat that cause. If the genital tract is excoriated, or there is phymosis, relieve the irritating cause. Bathing the back with cold water at bed-time is sometimes beneficial. Quite hot water may be used in place of cold water. Simple friction or massage of the back just above the hips may be employed where no water is used. Elevating the foot of the bed a little may do some good.

Internally give Belladonna IX, 1 tablet morning and evening.

Cimicifuga IX, tablet three times a day may be tried.

Do not give much liquid for supper. Try to remove any local irritation and have patience and all cases will recover. Some even do not obtain full control of the urinary apparatus until ten or twelve years of age. Children otherwise healthy may be thus troubled much to their own chagrin and taunts are cruel.

## BLOOD-POISON.

Blood-poisoning is due to the absorption of the products of infected areas. The putrefactive germs may enter the circulation or the poison of these germs may produce changes in the blood that are very serious and often fatal. Abscesses. Injuries resulting in infection and child-bed infection are the most frequent causes of blood-poison.

The symptoms of blood-poison are a continued high fever; headache; weak, rapid pulse; nausea or want of appetite; slight jaundice; diarrhœa as the poison becomes more intense, and finally a typhoid, dull, listless appearance marks the coming fatality. A cold, clammy sweat may also be present in the later stages of blood-poison. In some cases, particularly where the infection is in the abdomen, the temperature may be subnormal as the end is approached.

TREATMENT.—Where there is an area that is continually giving off poison and charging the system with something the blood cannot resist, the only thing to do is to remove the source of infection. If gangrene is the cause, remove the part. If an abscess, empty the pus cavity, and thoroughly cleanse the part. If a womb, as in child-bed fever, the uterus should be washed out with an antiseptic solution. This

not every one can do, but anyone can give a hot antiseptic vaginal injection and elevate the patient's head and try to get better drainage of the womb. Try, from whatever source the infection comes, to remove the cause; this may require an amputation, be that as it may, remove the cause.

Internally give stimulants. Quinine, five grains every four hours, acts well on the stomach and in the blood. Alcoholic stimulation should be resorted to, and it is wonderful how much alcoholic stimulation can be borne by one suffering with blood-poison. Quinine and whiskey are almost indispensable remedies in blood-poison. Strychnine, $^1/_{60}$ part of a grain, may be given every three to six hours. Try to keep up the heart.

The food should be light, but nourishing. Eggnogs, beef-tea and similar liquid foods are of much value.

## COLD IN THE HEAD, CORYZA.

A cold in the head is an acute inflammation of the upper air passages. Exposure is the chief cause. At the onset the patient is languid and chilly. The nose may seem dry and breathing difficult. Soon there is a watery discharge from the nose and the nostril feels raw and sore. The mucous membrane of the

eyes may share in the inflammation and the eyes water. The throat may become involved and painful, and the voice husky or lost. Taste and smell may be absent. Usually in a few days the symptoms subside and recovery follows.

TREATMENT.—In the early stage where there is chill and fever with rapid pulse give Aconite IX, one tablet every hour. When the eyes begin to water and the nose runs and the urine becomes free and almost colorless, as is often the case, and the patient feels drowsy, languid and sore all over the body, give Gelsemium $\theta$, one tablet every hour, until the profuse running of the nose ceases. Later for the cold in the head, where the discharge is bland, Pulsatilla $\theta$, one tablet every two hours, is often very beneficial. At the onset of a cold in the head, or cold on the chest, a prompt purge will assist greatly other methods of treatment. The old mother's remedy of fried onions for supper is by no means inefficient, and for those who like onions not unpleasant treatment.

## BRONCHITIS, OR COLD ON THE CHEST.

The symptoms of acute cold on the chest may mark the onset of measles, whooping cough or la grippe. Irritant vapors may also cause the symptoms of a cold on the chest. The usual cause is exposure to cold or damp atmosphere, after the body has been over-heated. The skin is very active in eliminating waste material from the body. When all the pores of the skin are open and perspiration is present, a sudden change of the temperature or a draught may cause the pores to close and temporarily cease to act. The waste matter that should have been thrown off by the skin is forced back on the lungs, bowels and kidneys. As a result from over-work and congestion a cold on the chest may ensue with cough and expectoration. The bowels may be irritated and congested and a diarrhœa result, or the kidneys may suffer in like manner and be forced to do extra work.

TREATMENT.—When from exposure a cold on the chest is developed, much good may be accomplished by relieving the lungs of some of the strain by asking more of the bowels, for which purpose a prompt purge should be given. Soaking the feet in hot water will often help to relieve the congestion of the

chest, as it does the head in headache, by drawing some of the blood elsewhere.

Chill, fever and rapid pulse are to be expected in the early stage, and call for Aconite $\theta$, 1 tablet every hour for five or six doses. When cough and rattling of the chest from mucus begins to develop, or following the Aconite, one of the best remedies is Ipecac $\theta$, 1 tablet every hour until the expectoration is free. Ipecac, besides stimulating the lungs, causes the skin to do more work and aids in restoring the equilibrium of the excretory functions. The various cough medicines given to hasten expectoration and quiet the irritability of the mucous membranes of the bronchial tubes are very good, but care should be observed in giving cough syrup to children because many contain opiates that are poorly borne by children.

For an irritating cough at night that prevents sleep wring out a cloth in quite hot water and place on the chest next to the skin. Bathing in hot water and brisk rubbing with a coarse towel will help to start the skin to action. Avoid a chill or exposure to draught during the bath.

## CHRONIC COUGH OR CHRONIC BRONCHITIS.

The causes of chronic cough may be repeated colds or repeated attacks of acute bronchitis. Chronic heart, lung and kidney diseases are often the cause of chronic cough. Old people are apt to have a chronic cough.

The symptoms are shortness of breath on exertion, and soreness behind the breast bone, associated *with chronic* cough and expectoration.

TREATMENT.—If due to any chronic lesion of the heart, or kidneys, or lungs. Treat the cause. Improve the general health. Avoid exposure. Give any good expectorant cough medicine.

## CARBUNCLE.

Carbuncles differ from boils in being deeper seated, longer in duration and more dangerous and destructive in nature. The cause of carbuncles is much the same as that of boils, however certain diseases such as Bright's disease, predispose to carbuncles. The favored locality for the formation of a carbuncle is on the back of the neck, or on the back and on the buttox. When a carbuncle forms there is much disturbance of

the system, resembling that of acute abscess. There is chill, fever and burning pain. At first there is a darkened, painful area, not localized as in the case of a boil, but flattened and extensive; the skin is hot and has a dough-like feel. In about two weeks the carbuncle begins to head and several points become white and finally break down, discharging at first a watery pus; later there may be seen in each of the openings white shreds and masses of tissue that are sloughing away, and finally all the openings will coalesce and one large sloughing cavity be formed. When all is done and the cavity free of sloughs healing takes place rapidly. A carbuncle lasts from four to six weeks and is a very serious disease when attacking the very young or very old, or those reduced in health by disease.

TREATMENT.—The early free incision and opening the cavity to its extent, and thorough cauterizing with caustic or pure Carbolic acid, is the best and safest procedure. Poultices do more harm than good. To allow a carbuncle to form and open is at times a great risk, particularly in the enfeebled, as blood-poison may easily result from so large a pus cavity.

Those suffering from a carbuncle should have the best of nourishing food and be given Quinine 3 grains three times a day after meals. Or Tr. Nux vomica 3 drops three

times a day after meals, and at times alcoholic stimulants. Keep up the strength of the patient if possible. There are two remedies that are of value for either carbuncles or boils:

Ferrum phos. 1x strength, 1 tablet every four hours, or Hepar sulphur 4x, 1 tablet every three hours. Either of the foregoing may be used where inflammation is present and a boil or a carbuncle is threatened, with a hope to avert pus formation. When once pus forms and it is desired to hasten the heading of a boil or carbuncle given Hepar sulphur 1x, 2 tablets every three hours.

## CONVULSIONS.

Convulsions may be of several varieties: Epilepsy, puerperal or child-bed convulsions, and infantile convulsions.

The cause of convulsions may be in the brain, as is shown in epilepsy, or excited by nervous stimuli from any part of the system, as is shown by the convulsions common to children.

Convulsions originating in the brain, from tumor or lesion of the brain, are apt to be only partial, attacking first a hand or one side of the body, and finally becoming general, though the movements may only be seen on the affected side.

Convulsions caused by irritation from without or reflex nervous irritation are of both sides of the body during the convulsion, and after the convulsion one side is not more affected than the other, as is apt to be the case where the lesion is in the brain structures. Convulsions of childhood are apt to result from indigestion, teething, worms in the intestines, and precede the onset of the eruptive fevers, meningitis, measles, whooping cough, etc.

If the pulse is rapid and the temperature high and the head congested, as is shown by the throbbing fontanelle, the convulsion may precede some of the eruptive fevers. If the temperature is normal and the pulse not much accelerated, the cause may be something in the nose or ear. Sometimes convulsions result from an exhausted condition, such as the loss of blood or continued diarrhœa. The onset of a convulsion is usually preceded by a period of uneasiness. Then there is rigidity and a choking noise, the eyes roll up, the lips are blue and the hand clenched. Twitching of the arms and feet, foaming at the mouth, rigidity of the body and possibly involuntary urination are present during a convulsive spasm. Then follows relaxation and sleep.

TREATMENT.—There is little to be done for epileptic convulsions except to put something between the teeth that the tongue be not bitten.

Child-bed convulsions are very difficult to treat. Give 5 drops of the Tr. Veratrum viride every fifteen minutes until the pulse is reduced to about sixty per minute, not below sixty per minute. Bromide of Potash may be given in thirty-grain doses, with fifteen grains of Chloral hydrate; give per rectum as an injection in 1 ounce of water; repeat in a half hour, if necessary. Ether is of much service and should not be forgotten. Give enough to quiet the patient. If Chloral has not been given, give Chloroform until the nervous excitability has lessened.

Infantile convulsions should receive the most consideration, as they are the most frequent encountered. The first thing usually done is to put the child in a warm bath (100° F.), which relieves the nervous excitement to a marked degree. Ether may be given until the convulsions cease. Bromide of Potash may be given before the convulsion begins, from 5 to 10 grains in water for two or three doses, about thirty minutes apart. The drug may be given per rectum if the child is in convulsions, 10 grains to ½ ounce of water.

If the convulsion is due to a foreign body in the nose or ear, or to exhaustion from loss of blood or diarrhœa, the hot bath is not advisable. Remove the foreign body. If from exhaustion give brandy and water, 1 to 2 teaspoonfuls to the same amount of water, as an injection. If teething is the cause lance

the offending gum. If the stomach, empty the stomach and given an enema, and later a cathartic. Try to remove the cause and to prevent a recurrence.

## CONSTIPATION.

CAUSES.—More cases are traceable to a want of regularity of habit than to any other cause. Torpidity of the liver and inactivity of the bowels, sedentary habits or want of proper physical exercise play an important role as causative factors. Dark complected people are more often constipated than fair ones. Pregnancy, tumors, stricture of the bowel, old age and drug habits are all causative factors.

Symptoms of constipation are headache, loss of appetite, furred tongue, the absence of an evacuation for several days. Nausea or vomiting and diarrhœa following an interval of constipation should lead one to suspect impaction and should be treated accordingly. Piles, ulcers of the rectum and pelvic distress are all caused or encouraged by constipation.

TREATMENT.—Attend regularly to the call of nature at a set hour of the day and allow nothing to postpone this obligation. If this one vow is faithfully kept it is better than many drugs in the treatment of the trouble. A cup of cold water before retiring and one soon after rising are of much service. Fruits, such as prunes and figs, or fruits in general, are of

much benefit to the habitually constipated, especially so if made part of the regular diet. The coarser muscles and foods all have a laxative action on the bowel. If the abdomen is flabby a fifteen minutes' massage and the wearing of an abdominal support will be of much service, especially so in the case of the aged.

A glycerine suppository or a simple enema at a regular hour is to be recommended to establish a regular habit, but not continued when the habit is formed. All of the many cathartics will give relief for the time, but few, if any, there are that do not constipate the more firmly when their action ceases, leaving the patient in a worse state than before. The continued use of drugs aggravates a constipated habit and their use is only a method of temporizing and the confession of laziness on the part of the habitually constipated. The constipation of pregnancy should be relieved by enema, of the aged by enema and massage and the abdominal support; that from torpor of the liver or atony of the bowel, by taking more regular exercise, the use of coarse mush for breakfast, and to start up the liver:

℞. Calomel, ..... $^1/_{10}$ grain.
Soda Bicarb., ...1 grain.
Pill.

Take 1 pill every three hours for a day or two.

Where there is impaction of the bowel it

may be necessary to use the finger or the small end of a spoon to remove a portion of the hardened mass; but, if possible, induce the bowels to move by giving slowly an enema of soap water; do not stop until the bowel is thoroughly empty.

### CONSTIPATION IN INFANTS.

Constipation in infants is common, and often the cause is hard to ascertain. It is thought by some to be due to a lack of fat in the food, and the supply of this in the form of olive oil or any good fat is often sufficient to relieve the trouble. Small suppositories of cocoa butter or soap suppositories are very effective to bring about a movement. Soap water enemas are also very successful.

To move the bowels:

℞. Olive oil, .....½ drachm.
Castor oil, .....½ drachm.

Mix well and give one dose. Repeat this every six hours until a movement is produced.

Cream may be added to the milk of bottle-fed babies, or olive oil may be given with the food of infants, which alone may be enough to relieve the constipation.

## CROUP.

Exposure to cold and damp and acute catarrhal conditions of the larynx may cause a train of symptoms known as croup.

SYMPTOMS.—The symptoms of croup are high temperature, hoarseness of the voice, and a *metallic cough*, following exposure to cold and damp; this may continue for a few days and then pass off without more marked symptoms. The child may have been playing about all day and have no more symptoms than a slight cough. In the night, after a restless period of sleep, the child suddenly springs up in the bed and with a wild, frightened appearance clutches at its throat. The voice, which was only hoarse during the day, is now loud and harsh, the cough has a decided metallic ring, which, when once heard, can always be recognized in succeeding cases. The nostrils are dilated. There is much effort in breathing and the chest walls may be seen heaving up and down as the child struggles for breath. The face may be congested and even bluish, the skin hot and the pulse tense and rapid; suffocation may seem near at hand. The attack usually passes off in an hour or two, and the child seems as well as usual the following day. Usually an attack occurs on the following night and is more severe than the first. One attack predisposes to subsequent attacks throughout childhood.

TREATMENT.—From the time the child shows hoarseness and a tendency to the metallic ringing cough, which is a characteristic of croup, he should be confined to the house, in a warm room, where the atmosphere

is kept damp by steam. Give Wine of Ipecac, 4 drops at noon, again at 3 o'clock and again at bed time. Should an attack of the croup occur, give from 10 to 20 drops of the Wine or Syrup of Ipecac, and, if necessary, give even enough to cause vomiting, which will usually dislodge the mucus from the throat and give prompt relief. In addition to this, place the child in an atmosphere of steam, the temperature of the room being raised to 75 degrees F. Moist heat to the throat or hot baths are also beneficial.

The succeeding treatment is to keep the child in a warm room and give Ipecac in small doses in the afternoon and evening for a few days until all the symptoms disappear.

## DIPHTHERIA.

Diphtheria is an acute contagious disease, caused by a bacillus which attacks the membrane of the throat.

The disease is more common during early childhood than in later years, though no one is immune. Diphtheria may be severe or mild; but if mild in one case it may be severe in another. Pharyngitis or sore throat predisposes to diphtheria. There is a period of incubation from two to ten days after exposure. Diphtheria usually begins with chills, fever, languor and sore throat. The child complains of pain on swallowing. The muscles of the

neck are stiff. The glands under the jaw are swollen and tender. The pulse is rapid and weak. The fever is not regular and never very high. There is a grayish-white membrane found on the tonsils that extends around the sides of the throat and up over the sides of the soft palate. The posterior wall of the throat may have patches or be covered with the same membrane. The membrane of diphtheria, when stripped off, leaves a raw and bleeding surface. Which surface is soon covered again with the same kind of membrane.

The membrane of diphtheria may extend into the larynx or indeed may begin there and form what is commonly called membraneous croup.

The symptoms of diphtheria of the larynx or membraneous croup are the same as given for diphtheria, with the addition of hoarseness, croupy cough and difficult breathing.

Diphtheria lasts from a few days to two weeks.

The danger from diphtheria seems to be from the amount of poison secreted by the germs and absorbed by the blood.

Following diphtheria there may be paralysis of the throat and swallowing becomes very difficult for a long time. Drooping of the eyelids, or squints, or cross-eye may result from the disease. Rarely the extremities are paralyzed.

TREATMENT.—One suffering from diphtheria

should be isolated that others may not be infected. Keep the patient quiet. Give good nourishing food. Liquid food will be preferable, such as eggs, milk, beef tea and gruels. Whisky or brandy should be added to the food as soon as the pulse weakens or becomes soft.

The air of the room should be kept moist by evaporating water over a spirit lamp, or, if that is not to be had, over the stove. To the water that is to be evaporated a little oil of Turpentine or oil of Eucalyptus may well be added. The cresoline lamp may be used.

The throat should be kept clean with some antiseptic solution. Listerine diluted with water, one to ten parts of water may be used. Peroxide of Hydrogen may be employed pure or dilute used on a mop to remove the membrane and cleanse the walls of the throat.

Borax may be used as directed, for sore mouth, as a mop to cleanse the throat and remove the membrane.

The germs in the membranes secrete a poison, which, when it becomes abundant enough, acts as a poison to the diphtheria germ itself, and the bacillus dies poisoned by its own toxine. The question is, will the poison secreted by the diphtheria germ kill the child or the germ first? If the child has sufficient strength the germ will be the first to perish. With this object in view Antitoxine is administered, that while the child

is yet strong by adding to the poison the diphtheria germs are secreting, the same poison obtained elsewhere, the two combined will destroy the germs of diphtheria before the child becomes so weak as to succumb itself. Antitoxine is strongly to be advised early in the disease, but not after the child is very weak.

## DROPSY.

Dropsy is the collection of more than the normal amount of water in the tissues of the body. Dropsy may affect the hands and feet, the abdomen or the whole body.

The cause of dropsy may be found in the circulation; when the heart is weak, water escapes through the small blood vessels into the tissues. In kidney disease the water is not thrown off in sufficient quantities and is held back in the system. Liver disease may cause dropsy of the abdomen by obstructing the circulation of the abdomen and causing the watery elements of the blood to escape into the abdomen, where the resistance is not as great as it is to pass the liver.

TREATMENT.—It may be necessary to remove some of the water to give comfort to the patient. This may be done by sweat-baths in the sweating cabinet or by purgation, removing much of the water by the bowels. To re-

move dropsical effusions by purgation no purgative is superior to Epsom Salts, ½ ounce, two or three times a day. The kidneys may be called upon for extra work, if the dropsy is not caused by the kidney. Cream of Tartar, often found in the household, in 15 grain doses repeated three times a day will often assist in securing more work from the kidneys. Diuretin or other drugs prepared with a view to act on the kidneys may be given. Gin or the Spiritus Juniperi U. S. P. are both valuable diuretics. One to 4 teaspoonfuls of the gin, and ½ to 1 teaspoonful of the Juniper Spirits may be given at a dose and repeated every three hours.

It is important after doing something to relieve the dropsical condition to do something to remove the cause. Heart tonics are very frequently called for to restore the circulation to its normal condition.

## DIARRHŒA.

Diarrhœa is a symptom of many diseased conditions and is recognized by the passage of frequent liquid or semi-liquid stools. It is a symptom of many diseases at the time of their onset, and a later symptom of other affections. It may result from mental excitement or from purgative drugs, a change in the temperature

or the ingestion of unwholesome food, such as unripe fruit or dishes that are tainted by decomposition.

The acute form of diarrhœa is nature's effort to throw off an offensive burden on the digestive tract. Much undigested food in the movements indicates that the trouble is in the upper bowel, and much mucus points to the lower bowel as the seat of trouble.

TREATMENT.—The food should be withheld for a meal or two, and it is good practice to give:

℞. Calomel, 3 grains, and an enema of salt water.

If there is much undigested food the Calomel alone may suffice; but if the lower bowel is affected and there is much mucus the enema should also be given. After six or eight hours, when the bowel is thoroughly empty of its irritating contents:

℞. Bismuth Subnitrate, 10 grains. Powder.

Give one powder every three hours until four doses have been taken. Or

℞. Laudanum, 10 drops, in water.

Give the Laudanum at intervals of three hours, and if necessary give three or four of the 10-drop doses; but in no instance should the Laudanum be given to babes or children, as they are very susceptible to the drug.

A liquid diet of boiled milk is the best food to be given until the bowels are back to their

normal condition. On resuming solid food avoid fruits.

### DISCHARGES FROM THE BOWELS.

The bowel movements of a child at birth are as a rule green. In a babe that is nursing the movement is light yellow and soft. During dentition the stools are apt to be frothy or greenish as a result of disturbed digestion. Some drugs color the stool. Much undigested food in the bowel movement indicates that the stomach and small intestines are not working right. If there is much mucus in the movements the trouble is in the lower bowel. Very light colored movements indicate that there is a lack of bile, and much dark coloring of the fæces would lead one to think there is an excess of bile. Frothy or offensive movements indicate fermentive indigestion and irritation of the small intestines. Flattened fæces indicate some obstruction of the rectum usually from pressure from surrounding structures. Small stools may indicate stricture of the rectum.

## DENTITION OR TEETHING.

"The teeth appear in the following order: 6th to 8th month, the two lower middle incisors; 8th to 10th month, the four upper incisors; 12th to 14th month, the two lateral lower incisors, and the four first molars; 18th to 20th month, the four canines; the 28th to 32d month, the four second molars."—ROTCH.

The appearance of the teeth is influenced by the health of the child and is delayed by rachitis. Much variation in the date of the appearance of the teeth often occurs, with no diseased condition of the child as an explanation. Difficult teething may be accompanied by convulsions. For the convulsions give the child a hot bath and afterward remove the cause by incising or lancing the gum above the troublesome tooth. Disturbances of digestion are very common during teething, possibly influenced by the appearance of the teeth, and in many cases simply due to improper feeding and a lack of care as to what the child bites on or chews at to press the gums upon. Diarrhœa is the most common trouble, and when of a foul, fœtid odor should not be stopped too soon, as the poisonous contents of the bowel may be retained to the injury of the child. If not dangerously severe the diarrhœa is not to be looked upon with alarm;

often a thorough emptying of the bowel by a dose of Castor oil, followed by from two to four grains of Subnitrate of Bismuth, every three hours, may stop the diarrhœa. The food should be discontinued for six hours and when resumed let it be of boiled milk, and for older children brown flour gruel may be added to the milk diet. Gradually go back to a mixed diet.

## DISTURBANCES OF DIGESTION.

Furring of the tongue is looked upon as a sign of disturbed digestion. Low fevers and general atonic conditions of the system are generally accompanied by a furred tongue. A gray-coated tongue which is flabby and coated only on the edges is said to indicate gastric or intestinal catarrh. Sleeping with the mouth open will cause furring of the tongue. In some forms of sore throat the tongue is furred. In the malignant fevers the tongue is coated dark brown to almost black and is often very dry. A thick swollen tongue, showing the imprints of the teeth and coated white, is seen in abdominal affections and in appendicitis.

### VOMITING.

In babes vomiting, unless prolonged, is not of much consequence and may be due to rapid

feeding or some slight gastric disturbance. If there is vomiting associated with colic, withhold the food for a short time and give a dose of Castor oil. Vomiting in older children and adults may be due to nauseating food, tepid drinks, worms, biliary colic and pregnancy. Vomiting without previous nausea and which expels the food as if thrown from the patient is indicative of brain trouble and may follow injuries to the head or accompany brain diseases.

TREATMENT.—The treatment of vomiting is rest of the stomach and occasionally mild stimulants. The stimulants best given are hot water or bits of ice, coffee, brandy and acid drinks.

## HICCOUGH.

Hiccough is, as a rule, of minor importance, but to the weak and enfeebled it is often very distressing and sometimes injurious. Hiccough is frequently caused by too rapid eating of hot food, and in such cases a few sips of water will usually suffice for a cure. When associated with abdominal affections and low forms of disease, it is no minor complication to treat. For such cases allow the patient to suck ice. A teaspoonful of salt in vinegar makes a good solution to give for hiccough;

give small quantities, but do not repeat too often. Morphine, ¼ grain for an adult, may be required in some cases, and even small amounts of Chloroform may have to be given. When the patient is strong, if sips of water fail to cure, have him hold his breath for a little while, and if this fails have him tickle his nose with something; the sneezing which follows usually stops the hiccough.

## COLIC.

Colic is usually a result of irritant food, of flatulence, of fæcal accumulations and of lead poisonings. The symptoms are paroxysms of twisting pain around the navel which is temporarily relieved by pressure, and permanently relieved by the expulsion of the fæces or flatus. In lead colic there are blue lines around the teeth on the gums. Infantile colic is usually a result of indigestion.

TREATMENT.—To remove the cause it is clear that the offending contents of the stomach and bowels should be removed. In some instances an emetic and in others a prompt purge are the most advisable treatment. While the purge is acting it may be necessary to temporarily relieve the pain by a dose of Morphine from ⅛ to ¼ grain, or Laudanum, ten to twenty drops. Do not give Laudanum or Morphine to children for colic. One or two

drops of the Oil of Peppermint, with or without the same amount of Tr. Colocynthis, may be given every fifteen minutes until relief is experienced, or two or three doses have been given. Heat or pressure to the abdomen is very soothing and beneficial. For the colic of babies, rest the stomach against the hot water bottle and internally give hot Chamomile tea or a few drops of hot brandy in hot water, or a few drops of the Oil of Peppermint in hot water, give about ¼ drop of Peppermint at a dose for three or four doses. Give the child a dose of Castor oil and guard the feeding that the attack is not repeated.

Hot compresses wrung out of hot water, on which a little Turpentine may be sprinkled, often give prompt relief when applied to the abdomen.

## DIGESTIVE SYSTEM.

### DYSPEPSIA.

There are several varieties of dyspepsia. The disease is common at all ages and in all climates.

ACUTE DYSPEPSIA.—The causes of acute dyspepsia if well understood will assist much in the proper care of those suffering from the same. Rapid eating, or eating more than the

digestion can care for, are common causes. Foods that have undergone fermentative changes, alcoholic drinks and mental and physical exhaustion are also important in causing dyspepsia.

SYMPTOMS.—Coated tongue, fulness and distress in the abdomen, eructation or belching, dizziness, nausea and often vomiting, flatulence and colicky pains. In children fever and diarrhœa are common.

TREATMENT.—Recovery usually occurs in twenty-four hours, even if no medicine is given; but much can be done for the comfort of the patient. If there is nausea or vomiting, a glass of warm water will assist the stomach to rid itself of the offending burden. For children a dose of Castor oil should be given, and adults should take some prompt cathartic. If there is much acidity of the stomach:

℞. Soda .....1 teaspoonful.
Water .....½ cup.

Stir, and take two or three teaspoonfuls and repeat in a short time if necessary, *or*

℞. Tincture of Nux vomica, 1 to 3 drops, taken on sugar. *Sometimes,*

℞. Quinine sulphate, 3 grs.

is given instead of the Nux vomica.

Food should be withheld for one or two meals. The error in diet sought for and corrected, and food selected that will not irritate the stomach.

## ERYSIPELAS.

Erysipelas is an acute contagious disease. After exposure the disease may develop in from two to seven days.

Those suffering with erysipelas should be careful not to infect others by the use of the same towels, wash basins or any article that touch or come in contact with those not infected. No one should go from the room of an erysipelas patient into the lying-in chamber, as the mother is very apt to become infected, and the most dire results follow.

The eruption of erysipelas is preceded by slight constitutional disturbances; languor, chilliness and tingling of the affected part are apt to be present. The pulse quickens. The tongue is coated. The appetite lost and the urine scant and high colored.

The eruption usually begins on the face, is bright red, swollen. Tense and has sharply defined edges. The surface is first smooth and glossy; but later is covered with vesicles. There is swelling of the surrounding parts. The disease spreads from the edges.

Erysipelas seldom lasts longer than a week or ten days, half of which time the disease requires to fully develop, the other half to gradually disappear. There is scaling of the affected areas after recovery is well advanced.

Relapses are common, and one attack predisposes to another.

TREATMENT.—Isolate the patient. Require complete rest, give nourishing food, and some tonic, such as Nux vomica, three tablets three times a day, or five grains of Quinine three times a day. Keep the bowels moving freely. Antiseptic application may be applied to the part, of which the Bichloride of Mercury $^1/_{4000}$ is as good as any. Iodine is at times painted around the infected area with a hope to stop the spreading. Lead Water and Laudanum may be used as an application. The salve given as a healing salve may be spread on lint and applied to the affected area.

## ECZEMA, OR TETTER.

Eczema is not a contagious disease, but is more a constitutional affection. Eczema is characterized by papules, vesicles, pustules, scales and crust. More or less watery discharge and *continuous itching*.

The causes of eczema are anything that lowers the vitality. External irritants like hard soap often provoke eczema among infants and babes. Heat and cold may cause an eczematous eruption. Dyspepsia may be an exciting cause. In nursing babes or bottle-fed infants eczema may result from improper con-

stituents of the food. An infant suffering from eczema as a result of improper diet will usually show signs of indigestion, or be chronically constipated. Where the food is at fault there must be a change of diet before remedies will act.

Eczema may be in irregular patches on the face, or vesicle or papules on the extremities. There may be poorly defined patches surrounded by many vesicles that break and leave a raw surface. There may be pustules that rupture and form crusts. In the scalp there are usually patches covered by crusts or scales.

Eczema has for the one and ever present symptom *itching*, no matter if the eruption is vesicular, pustular or crusting. No matter where the location is the itching is always present.

TREATMENT.—Improve the health. Avoid salt meats, pickles, pastries, cheese. Irritant soaps. Leave no part moist after washing and, indeed, too frequent washing is to be avoided. The digestion should be favored in every way. The bowels kept moving regularly, and exercise in the open air should be encouraged.

Bottle-fed babies should have a change of food and if constipated see that more cream is added to the milk or give a teaspoonful of Olive oil twice a day with the milk that the bowels be kept moving more freely.

For the itching:

℞. Salicylic acid .....5 grains.
Olive oil .....1 ounce.

Shake well and rub on the itching surface.

Or,

℞. Carbolic acid... .....1 drachm.
Glycerine .....2 drachms.
Water .....8 ounces.

Shake well and bathe the itching surface.

Zinc oxide may be applied to the crusts or itching parts and left as a covering or ointment. It is well at times to remove the scales and cleanse the parts. It is not necessary to use water, as one of the above preparations may be used to soften the scales and then by carefully rubbing the part may be cleansed.

## EARACHE.

Earache may be due to some foreign body in the ear. To the accumulation of ear wax, and to inflammation of the middle ear.

There is very often an abscess to open and discharge. At times following exposure to cold, severe earache may result without the formation of any abscess or discharge.

The pain is intense and very fatiguing. The child will all of a sudden start and scream and be in intense agony. Presently the pain will cease and sleep may follow, only to be aroused again by the intense pain of another

paroxysm. Finally, if an abscess be present, rupture will take place and permanent relief be afforded.

Earache may last from one to two hours, to one or two days.

TREATMENT.—Hot applications held to the side of the head often give prompt relief.

Place a few drops of Chloroform on a little cotton and place the cotton in the bowl of a pipe. Blow the Chloroform into the ear through the stem of the pipe.

In the same way blowing tobacco smoke into the ear often gives relief.

Laudanum, Glycerine and Olive oil mixed in equal parts may be dropped into the ear. Drop a few drops into the ear and allow to remain a short time and then let run out.

Middle ear disease is so serious an affection that if repeated attacks of earache are followed by an offensive discharge from the ear the time for home remedies ceases and medical attention is strongly to be advised.

## CONJUNCTIVITIS, OR SORE EYES.

The eyes may become sore from several causes. Infection of the mucous membrane of the eyes with some of the pus forming germs is common. Infants may suffer from a severe form of sore eye contracted from a diseased genital tract of the mother.

Raw, cold wind of spring often acts as an exciting cause, producing inflammation of the conjunctiva or mucous membrane of the eye. Associated with snow-blindness is always conjunctivitis. Some of the deeper and more serious affections of the eye have an accompanying inflammation of the conjunctiva.

The symptoms are watering of the eye. A sensation of sand in the eye, pain and dread of light.

TREATMENT.—Cleanliness is of prime importance. Some antiseptic solution should be dropped in the eye every three to six hours.

The Sulphate of Copper one per cent. solution, or one grain to one and a half teaspoonfuls of water, is a very safe and reliable remedy, Drop a few drops in the eye three or four times a day.

Boracic acid solution as much as the water will absorb, is also a safe and reliable remedy. Place a few drops in the eye four or five times a day.

Keep the eye cleansed by bathing the lids in warm soap water. And wash out the eye at short intervals (every two hours) with the Boric acid solution if there is pus or a purulent discharge.

## FACE AND EYES.

The colors of the face vary in health. Normal darkening is found after exposure to the wind and sun, and normal bleaching of color after continued housing. A yellowness of the white of the eye indicates jaundice before the skin appears yellow. The white of the eye may become quite red from the straining during a paroxysm of whooping cough. Dark lines under the eyes may indicate a disturbance of the digestion, worms in children, a disturbance of the sexual functions, and the result of late hours and little sleep. Puffiness under the eyes is met with in some forms of kidney disease and from exposure to cold and wind, also from crying and from sleeping long in a poorly ventilated room. Yellow coloring of the face may be due to jaundice, or, in a slight degree, to biliousness. Waxy paleness of the face is met with in consumption and almost all of the constitutional diseases that are of a chronic character. A bright red spot on one of the cheeks over the cheek-bone is common in advanced stages of consumption. This is not the bright rosy flush so common in health during youth and early adolescence. Flushing of the face is met with in fevers. Transitory flushes are common at the climacteric. Blueness of the lips may be due to poor circulation.

## COLD, FROST-BITE, CHILBLAIN.

On going into intense cold there is a sensation of obstructed breathing, as if the passages of the nose were narrowed, simultaneously also is a slight rawness and fulness of the chest. Reaction in the nose soon follows, and a watery discharge is very common as a result of the hyperæmia of the mucous membrane. Slight cough and expectoration is noted in some. The breathing then becomes free, and remains so during the exposure to the cold. Localities exposed to the cold at first tingle and show a lack of blood. The setting of the blood inward congests the brain and frontal headache follows; with the reaction and return of blood to the parts the headache subsides and a sense of faintness and nausea is often felt, which again rapidly subsides as the circulation becomes full and strong under the stimulating influence of the cold. For a time all of the natural powers combine to combat the inroads of cold, and the individual is alert to every pain and pang from without and within. There may even be anxiety. Finally the headache is again felt, there are chilly spells, one part after another tingles from cold; finally the tingling lessens and numbness and weight of the limbs follow. The mind is prone to reverie and to a sense of security; the cold is noted, but the desire to ward it off is gone,

and there is a strong desire to sit or recline and allow the mind to continue its thoughts. Drowsiness follows and an almost irresistible desire comes to sleep, and at the same time the sensation in the limbs is lost. The individual may know that he is freezing, but the will is too weak to rouse the body to action. Unless aid soon comes to such a one death is imminent. Nature has exhausted her vital power and with the exhaustion the heart slows, and so does the respiration, and life's fire goes out. Those rescued, or even those suffering from cold and returning to a warm place, must observe care lest the congestion of the internal organs be relieved too quickly, and fainting or even death follow the setting of the blood to the surface, caused by the return of the circulation of the surface, leaving the heart, internal organs and brain with too little blood. To stimulate the lungs and heart, and retain part of the circulation in the internal organs, nothing surpasses hot drinks, and of these hot tea is to be given preference.

### FROST-BITE.

The sensation of cold is followed by tingling and aching of the part affected. Numbness and a sense of weight is noted and then all sensation is lost. On examination the part is white, stiff and frozen. So insidious is the inroad of cold that a frosted area may remain frozen for hours and the individual have not

the slightest knowledge of cold, pain or discomfort. The action of frost is, first, by direct injury to the tissues, and second and more noteworthy, the injury to the nerves that control the local circulation of the frosted area. Rapid restoration to the normal temperature is followed by inflammation, slough and gangrene. An individual with a frozen finger, toe or extremity should first be taken into a room that is scarcely above the freezing point, bundling with clothing sufficient to keep the body warm; the frozen part should then be rubbed with snow or immersed in ice water and gently rubbed while the frost is coming out. Gentle friction is necessary as the circulation returns; the least engorgement and stasis of the blood result in death of the part or gangrene. For a short time after the frost is out the rubbing should continue. After this first step the patient may be put to bed in a cool room. The frosted member should be elevated so that the arterial circulation is retarded and the venous circulation is assisted from the part by gravity. The limb should be left in an elevated position for several days, open to the air with neither cover nor dressings. The room must be kept cool (40 to 50 degrees F.). Allow the patient plenty of bedding that the room need not be kept warm. If the frost-bite has been superficial cold compresses of Lead-water and Laudanum will be soothing and assist in preventing inflammation. If the deeper struct-

ures have suffered from the cold, the Lead-water and Laudanum should not be used, but at intervals of two or three hours alcohol should be applied to the part, using gentle friction to stimulate the circulation. For two or three days the appearance may be quite normal and then, without apparent cause, suddenly the part may become inflamed and swollen, and later blacken and become dead and gangrene set in. If slough or gangrene develops the injured locality should be covered with a light dressing for a few days until the line of de markation is established between the part that is going to recover and the part that is hopelessly injured. The nerves are slow to recover after being frosted, and for this reason do not control the capillary bloodvessels, allowing of local congestion and distension. Above the injury the normal veins are not sufficient to carry away the excess of blood, and in the seat of injury the veins are distended, through walls of which exudation easily follows and restoration is retarded, finally ceases and gangrene ensues. The line of demarkation in superficial injuries is back of that in the deeper structures, making the stump of healthy tissue convex; but where the injury has been deep and of some hours' duration the reverse of this condition is to be found and the stump is concave. The bone least of all the tissue regains its vitality. Operations to remove frozen fingers, toes or extremities must be per-

formed well back of the line of demarkation, especially is this true of the bone, lest a second operation be necessary before the desired result is obtained.

Frosted tissues are low in vitality and healing may be retarded. Primary union cannot be expected as often as in operations on more healthy structures.

### CHILBLAIN.

Parts that have been frosted or exposed to cold for some time and then rapidly warmed behave in a peculiar manner and thus claim separate consideration. Hyperæsthesia of the affected area is the prominent feature of the trouble. The injury is more of the nerves than of the tissues. A rapid rise of temeprature in the part, with or without previous exposure to cold, may cause very annoying symptoms of burning and itching, with reddening and more or less swelling. Moist heat (the bath), the heat of heavy clothing, and sudden changes in the temperature are all causes that may excite the sensation of burning and itching. The treatment of such cases should be first directed to the prevention of rapid changes of temperature of the part affected. When local irritation is present the itching and pain may be arrested by the application of cold compresses wet with Lead-water and Laudanum, or by painting the part with the Fl. Ext. of Belladonna. Directing the treat-

ment to the injured nerves, massage and the use of astringent liniments are of value between the times of irritation. All parts that have been frozen are sensitive to cold for some time and should be given massage to restore the functional activity of the vessels, nerves and tissues of the part.

## FRACTURES.

Fractures may be complete or incomplete, or simple or compound. Fractures may be transverse, longitudinal, or diagonal. In the elbow we may have a fracture separating the bone lengthwise. The shaft of any long bone may break in a transverse or cross fracture, or the break may be in a diagonal direction.

The symptoms of fracture are pain, more than normal mobility, shortening of the limb, and a peculiar grating of the ends of the bone at the seat of the fracture. The muscles of the body have a continual tendency to draw together and are like rubber bands pulling on both sides of a bone. When fracture takes place the lower fragment is drawn up and made to override the upper fragments, causing shortening. To set a limb it will be necessary to overcome the contractility of the muscles and replace the fragments, coapting them in their normal position. The dressing should be firm but not too tight. Where the joints are involved it is always best to place the limb in

such a position that should the joint be stiff on healing the utility of the limb will be impaired as little as possible. Thus the elbow if involved in a fracture should be dressed with a splint of such an angle that the hand can be brought to the opposite shoulder. The knee, if injured, should be dressed in a slightly flexed position, which will be better for walking and sitting than a straight limb.

Fractures of the arm are common and may be of one or of both bones. If of one bone, draw the hand and lower fragment toward the side of the sound bone and slip the ends of the bone in apposition.

If there is a break of one or both bones of the forearm and the break is below the middle of the arm the hand may be placed against the abdomen and an internal angular splint applied, leaving the arm at right angles and using a splint that has a right angle and is bandaged to the arm above the elbow. Use a wide splint so as not to draw the fragments of the bone against the other bone by the pressure on the sides of the arm. If the fracture is of the upper part of the forearm, it may be necessary to bandage the arm to a splint with the palm of the hand up. This is occasioned when the bone on the thumb side of the arm is broken well to the upper end.

In breaks of the thigh it is necessary to overcome the action of the muscles, and the

thigh in particular is hard to deal with because of the powerful muscles involved. For this a double incline plane or a V-shaped splint should be used; the weight of the body will draw down while the knee is over the angle of the splint and some of the action of the muscles will be overcome. In fractures of the leg the position of the foot is to be borne in mind. Keep the toes pointing directly up. Shortening will result from most fractures, but no one will forgive you if the toe points in or out.

If a fractured bone breaks through the muscles and skin, the danger is greatly increased lest infection follow and serious trouble arise. If such should occur use the most rigid antiseptic measures in cleansing and dressing the wound. Apply such a splint and dressing that, if need be, the wound can be attended to or redressed without removing the splint.

Remember, a shortened limb, if in the normal position, is a useful limb; that a stiff joint is best if slightly bent; and that a compound fracture demands extra care and cleanliness.

## FAINTING AND LOSS OF CONSCIOUSNESS.

Dizziness and fainting are common symptoms and not diseases, due to anæmia of the brain or want of blood in the brain. If the circulation be drawn elsewhere, leaving the brain deficient in blood supply, the functions of the brain cannot be performed and the resulting symptoms are dimming of vision, nausea, dizziness, intense weakness and finally fainting or loss of consciousness. Besides a weak heart, fear and emotional excitement may cause the circulation to go elsewhere than to the head and fainting results, even if the heart is strong.

TREATMENT.—Nature acts wisely by causing a person that faints to become unconscious and fall. In the erect position the blood gravitates from the head and a weak heart cannot send the blood to the head; for this reason the position for one who feels faint or has fainted is not standing or sitting, but lying with, perhaps, the head slightly lower than the body. Undo the clothing about the neck and chest that the breathing and circulation may be unhampered. Some stimulating drug may be inhaled that, by acting on the nerves in a reflex manner, it will stimulate the heart to stronger action. The Aromatic Spirits of Ammonia is

one of the best stimulants of this kind. Heart tonics, such as brandy or Strychnine, may be used in medicinal doses.

Coma, or unconsciousness, may be caused by injuries to the head, epilepsy, apoplexy, sunstroke, drug-poisoning and uræmia or kidney disease. In coma there may be no lack of blood to the brain. Consciousness does not speedily return as it does in fainting.

The cause should be removed if possible in treating cases of coma.

## NORMAL HEART ACTION.

The normal pulse of an infant at birth is from 130 to 140 per minute; about the third year, 90 or 100; and the fourteenth year, 80 or 85. The normal adult pulse is usually given as 72 per minute, but in the old the heart slows to 65 or even 60. There is quite a range between the normal pulse of different persons; thus 70 may be normal for one and 80 for another. The pulse of women is normally about ten beats quicker than that of men. The standing position will raise the pulse ten or more beats per minute and active exercise will take it to 100 or even more in the normal adult. The pulse is increased by fevers, corresponding to the height of the fever. A quick, hard pulse indicates more the infectious fevers, and a quick, full and bounding pulse accompanies in-

flammation, and the febrile state of low disease, where there is absorption of poisonous disease products. A changeable pulse is met with in tobacco users and those suffering from nervous disorders. A slow pulse is common with fainting, brain diseases that are febrile, and tumors of, on injury to the brain. A fine, a scarcely perceptible, pulse is common as death approaches.

## HEART DISEASE.

In speaking of the diseases of the heart we would divide them into two classes: First, those affecting the heart itself, and second those disorders that have symptoms referable to the heart, but in which the heart is not the seat of the disease, but is only affected through the nervous system.

### ORGANIC HEART TROUBLE.

CAUSES.—Pneumonia and rheumatism more often than any other diseases cause valvular disease of the heart. Other affections such as typhoid fever or scarlet fever, etc., play a minor role in causing this trouble.

The disease seldom exists except as a result of some other affection. The poison, or the germs themselves, of some disease acting on the inner walls of the heart and its valves pro-

duce inflammatory changes, which on healing obstruct the openings of the heart, or the free action of its valves.

SYMPTOMS.—The symptoms of inflammation of the inner heart walls are vague and often not noticed at the time of the sickness that causes the injury to the heart. After rheumatism, pneumonia, typhoid fever or any of the infectious diseases endocarditis may exist. Shortness of breath on exertion and consciousness of the heart's action should lead you to suspect some involvement of the heart. If such exists, care should be exercised that the heart is not strained in any way until time has been given it to recover, or for compensation to take place. When the valves become deranged the normal heart work is obstructed and a train of symptoms are produced. The blood is dammed back into the lungs and shortness of breath ensues, cough, expectoration and even blood-spitting may result, caused by the engorgement of the lungs. Headache and dizziness may be caused by a lack of blood to the head. Dropsy may be present and is most likely to be noticed on the feet or ankles first, the urine becomes scanty and high-colored, and the digestion badly imparied, *i. e.,* there will be dyspeptic symptoms.

TREATMENT.—The first object to be sought is the repair of the heart, and this must be done by nature herself and the patient must

not hinder this very important process. Avoid over-exertion, such as running up stairs, heavy lifting or straining caused by allowing the bowels to become constipated. The patient should have plenty of fresh air and sunshine. Good easily digested food and lastly medicine.

There is probably no drug better than

℞. Tincture Strophanthus. One drop in water, or one tablet three times a day.

Strophanthus acts on the heart, stimulating the muscle itself, and is beneficial in assisting the heart to gain strength. Acting on the general circulation it assists much in relieving the distress of the various organs secondarily affected from an improper blood supply.

Ranking with Strophanthus and, in fact, an older drug known and used for this same trouble is Digitalis, which drug may be chosen over the former in cases where the heart's action is rapid and weak, and the urine scanty and high colored.

℞. Tr. Digitalis, three drops. Give on sugar, three times a day.

I prefer to give the Digitalis for only a short period, say, one week, and then turn to the Strophanthus. As symptoms subside stop the drugs.

## HEADACHE.

Headache is a symptom of many affections and by itself can hardly be successfully treated. Pain in the head usually results from some disturbance of the circulation to the head, from tumors of the brain, from inflammatory diseases of the brain or its meninges, and last, but not least, from reflex nervous irritation, of causes acting in distant parts of the body, as disturbances of digestion, eye strain, nasal catarrh, and disturbances of the reproductive functions or organs.

Headache due to meningitis, tumor, abscess, and diseases of brain substances are usually associated with disturbances of vision, paralysis and mental aberrations.

Headache due to congestion of the brain, as in fevers, sun-stroke, over mental work and obstruction of the return circulation of blood from the brain, have, as symptoms, pain in the head of an intense throbbing nature. The face is hot and flushed, the eyes glossy and injected, and the pain is made worse by excitement, motion or stooping. There may be a headache from want of blood to the brain caused by poor circulation, which will be associated with signs of poor circulation, such as cold extremities and fainting spells. A headache caused by lack of blood to the brain will be as

of a weight on the head; the face pale, the pulse weak, and the inhaling of stimulating drugs or the lowering of the head will be attended with relief of pain in the head.

Headache may result from poisons in the blood, from uræmic conditions and any state where, from disease, there is a product that should be thrown off by the system, but for some reason is retained and absorbed by the blood. Irritating the head and producing headache, as by irritating the nerves of the body, the poison may produce rheumatic pains.

Headache still may be and more often is produced by reflex nervous irritation than by any other cause. Disturbances of digestion in a reflex manner excite more headaches than any other given thing. Where the digestion is at fault the headache will be relieved by vomiting or the administration of something to stimulate the action of the stomach and bowels.

Diseases of the female reproductive organs may cause headache, which is worse at the time of the menses. The headache of disturbances peculiar to women will be worse on top of the head. There is a feeling as if the top of the head would fly off and pain is relieved by pressure.

TREATMENT.—If the headache is due to reflex causes, such as indigestion, give Tr. Nux vomica, three drops, or three tablets, for two

or three doses. There is often very prompt relief from the headache of indigestion if the stomach is relieved by an emetic. A prompt acting purge will often do wonders by ridding the stomach and bowels of an unwelcome burden.

If the headache is due to congestion of the brain, cold applications to the head and a hot foot bath will aid materially in the relief of the pain.

If the circulation is poor and the headache is due to want of blood to the brain, stimulating smelling salts and hot drinks or heart tonics will aid materially in giving relief.

If the eyes are at fault, secure proper glasses.

No treatment will afford permanent relief unless it be directed at the original cause. Headache powders are numerous, but are only a poor excuse at treatment and will not result in a cure.

## HIVES, OR URTICARIA.

Hives are usually caused by gastro-intestinal disorders. Emotion and excitement predispose to hives. Certain foods are apt to cause an eruption of wheals or hives on some persons, while on others the same food may cause no disturbance.

Hives appear suddenly and are as small red

pimples, which are slightly elevated and itch intensely.

TREATMENT.—If due to indigestion give a prompt acting purge and some tonic, such as Nux vomica θ, one to two tables every four hours. If the stomach is acid to such an extent as to produce sour belching or heartburn, give Soda Bicarbonate, three grains after meals. Internally the Salicylate of Soda in four grain doses may be given three times a day.

Locally, the itching may be relieved by bathing the itching areas with

℞. Acid Carbolic, ..½ drachm.
Glycerine, .....½ ounce.
Alcohol,
Water, aa, .....4 ounces.

Shake well and bathe the itching surface.

The itching of hives may often be relieved by bathing the surface with vinegar and water in equal parts.

Chloroform and Alcohol, one part of the former to eight parts of Alcohol, make a very good soothing application.

## HÆMORRHOIDS, OR PILES.

Hæmorrhoids, or piles, are bloody tumors of the lower end of the rectum. Piles are composed of dilated veins. The veins of the rectum have no valves as have the veins in other parts of the body, and anything that ob-

structs the reflow of blood predisposes to hæmorrhoids. Pregnancy, sedentary habits, the excessive use of purgatives and constipation are all common causes. Hæmorrhoids may be internal or external. External piles are due to a varicose condition of the external hæmorrhoidal veins, and are bluish rounded tumors, which can easily be emptied by pressure. Fissues and eczema of the surrounding skin are not uncommon with external piles. The hæmorrhoids, when inflamed, are extremely painful to the touch. They seldom bleed, though occasionally they suppurate and form an abscess. Itching of the parts is common.

TREATMENT.—Whatever that causes the obstruction of the reflow of blood when removed will open the way for medical and surgical treatment. Constipation should be avoided. The parts kept clean. Hot sponging will often relieve the itching and pain. Astringent pile salve may help to reduce the swelling and pain. Tr. Belladonna and Glycerine may be mixed in equal proportions and painted on the piles, after which hot applications will assist in relieving the pain. The operative treatment gives rapid relief and permanent recovery. Incision and emptying the clot, followed by packing the cavity with gauze to control bleeding, is the best treatment. If there is a large hæmorrhoidal mass excision of the entire mass or bloody tumors is the only sure form of relief.

### INTERNAL PILES.

Internal piles are found within the rectum. The appearance is the same as an external pile, only the tumor is covered with mucous membrane. The pile may also seem like a fold of the mucous membrane of the rectum. Internal piles are easily excited to bleeding by the irritation of the bowel movement. At first the bleeding only follows the passage of stool. Later in the course of time the bleeding may precede as well as follow the stool and may become a prolonged and troublesome condition. During defecation there is pain in the rectum and the pile mass easily protrudes through the sphincter ani, and if large may become strangulated and very painful and if not reduced slough away.

TREATMENT.—Constipation must be avoided by the use of laxatives and the regular movement of the bowels. Enæmas are very beneficial in some cases. After each stool the patient should wash the pile or pile mass and anoint them with an astringent ointment one time and the next time by some bland ointment; after anointing the pile replace in the rectum. Vaseline is good for the simple ointment, and Hamamelis and Æsculus cerate mixed in equal parts is a splendid astringent ointment for the alternate application.

Operative treatment or the removal of the mass is the surest cure, but is only to be done by the surgeon.

### ITCH OR SCABIES.

The itch is due to the presence of an animal parasite called the itch mite. The itch is always acquired by contact in some way with some one who has the itch.

The male itch mite remains on the surface of the skin and may be seen by the use of a strong magnifying glass. The female burrows into the skin and lays her eggs, causing the intense itching and the formation of vesicles and pustules.

The symptoms are intense itching associated with the eruption of small papules, vesicles and pustules. The itching is worse at night when warm in bed. The parts first affected are the hands between the fingers, then the wrists, then the genitalia, the inner surface of the thighs and the chest beneath the mamma. All of the body may become involved except the face, which remains free.

TREATMENT.—The destruction of the parasite is the only hope of a cure. There is no seven-year itch, but a case may last that long or longer unless treated. When the parasite is dead the disease is cured, be the time short or long.

Either of the following applications will cure:

℞. Orphol or Beta Naphtol Bismuth, ½ drachm. Lard or Vaseline, 1 ounce. Mix well and rub in well morning and evening.

℞. Sulphur Præcipitate, 1 to 2 drachms. Lard or Vaseline, 1 ounce. Mix and rub in well morning and evening.

The patient should have a hot bath, with soap and the ointment applied thoroughly. Rub in the ointment well morning and evening. Do not change the clothing or take a bath for a week. At the end of a week take a good bath, and if the disease is not cured repeat the treatment. When the mites are all dead the disease is cured.

## INFLUENZA OR GRIPPE.

Influenza is an acute infectious disease, characterized by catarrh of the respiratory organs, pain in the head, back and limbs, catarrh of the stomach and bowels and by extreme prostration. The disease often appears in epidemics. Influenza does not often kill of itself, but accompanying other diseases it proves itself to be very serious and often fatal. The disease may attack the respiratory organs, causing sneezing, watering of the eyes and nose, hoarseness and cough. If the muscles and limbs are at-

tacked there will be pain in the back of the head and pain in the back and limbs, causing intense discomfort and prostration. The digestive tract is often the center of the trouble. If this be true there will be colicky pain in the stomach and bowels. Nausea and loss of appetite. Indigestion after eating and colicky pains. Diarrhœa will also be a common symptom.

The grippe usually begins in an abrupt manner, with languor, pain in the head and back and slight fever. Soon the respiratory organs, the stomach and bowels or the nerves, muscles or joints may one or all become much affected. Complications with lung diseases, kidney affections and intestinal disorders are all to be regarded as unfavorable and are to receive what care they may demand.

TREATMENT.—There is no specific for the grippe or influenza. Rest in bed is to be enforced. Hot water bottles to the aching localities will afford some relief. The food should be liquid and such as may easily be digested. Milk, eggnog and beef tea are all of much service. Keep up the strength of the patient.

Such remedies as Aconite, Gelsemium, Belladonna and Ipecac may be given as the stage of the disease or symptoms may demand. Stimulants or tonics are beneficial.

## JAUNDICE.

Jaundice, or yellow coloring of the skin, is not a disease of itself, but a symptom of some deeper acting condition.

Before ever the skin becomes yellowed the coloring is to be seen in the eye.

The cause is generally an obstructive one, to the outlet of the bile from the liver. Biliary calculi may become clogged in the common bile duct, and be the cause of the jaundiced condition, for if the bile cannot be thrown off it will be absorbed and carried over the system by the blood and deposited in the tissues. The skin and eyes give evidence of the saturation of the body with bile.

Catarrhal conditions of the stomach and small intestines may be considered by far the most common cause of jaundice. The catarrh extending up the common bile duct obstructs the flow of bile and the same train of symptoms is produced as when a calculi occludes the passage of the bile. There is generally constipation, and the movements are attended with much straining and the passage of a clay colored stool and mucus. The skin is dry and scaly. The urine high colored and froths on being passed into a recepticle.

TREATMENT.—Since there is obstruction to the flow of bile it is quite reasonable to refrain from eating food that will excite the liver to action and require the action of the bile to be digested. Sugars, fats and starches should be avoided, and the patient put on lean meat, eggs, toasts and tea or milk. If constipation be present a dose of castor oil should be given and the bowels be kept open. Small doses of Bismuth Subnitrate, given two hours after meals, are often of service. From 1 to 3 drops of the Tr. Nux vomica after meals is also a good tonic. When the inflammation subsides the bile will escape and the jaundice disappear.

## PREGNANCY.

Normal pregnancy lasts 280 days, 40 weeks or a little more than 9 calendar months. Quickening occurs about the 16 or 18th week.

The signs of pregnancy are the absence of the flow, darkening of the zone around the nipple, bluish discoloration of the genital mucous membrane, enlargement and finally quickening.

It is important that the health of the mother be sustained from the very incipiency of pregnancy. The clothing should be warm

and free about the waist and abdomen. Lacing to hide the increasing tumor is a bad practice. The food should be such as is easily digested. All the products of the frying pan and rich pastries are objectionable. There is a tendency in the later months of pregnancy to constipation, which should be combated by eating fruits, prunes being one of the best. Oat mush is also a good diet. Enemata may be required to keep the bowel properly emptied. Daily exercise in the open air is highly advisable. Hot and over-crowded places should be avoided.

### MORNING SICKNESS.

There is no regularity in the degree or frequency of morning sickness. The cause is doubtless reflex nervous phenomena from the gravid uterus. When the uterus rises out of the abdominal cavity, and has more room, the morning sickness becomes less severe. The patient should not be allowed to miss the breakfast, and, if from rising sickness occurs, it is best to give a cup of coffee made after the directions in this book and some light food, and later in the forenoon she may get out of bed.

### FALLING.

About the end of the thirty-ninth week the breathing becomes more free and the appe-

tite is better, though frequent urination may disturb the rest of the patient and constipation be quite marked. This condition precedes labor about a week. If there is a variation it is less and not more than a week until labor.

### MISCARRIAGE.

Pregnancy may be interrupted at any stage or date of gestation. Before the end of the third month such interruption is called a miscarriage. The symptoms are little more than a severe prolonged menstruation. Miscarriage is apt to occur at either the eighth or twelfth week of gestation. The patient should go to bed when miscarriage is threatened and there is pain in the back and abdomen. Miscarriage should be prevented if possible by quiet and by rest during the eighth and twelfth week, for when once the habit of miscarriage is established there may be much trouble to advance pregnancy beyond that date. It is better for the mother to go on to full term than to suffer miscarriage or abortion.

### ABORTION.

After the third month, and before the seventh month, if the uterus spontaneously empties itself the condition is termed abortion. Abortion is a more grave condition to

handle than labor. Usually there is a period of heaviness in the abdomen and pain in the back preceding the expulsion of the ovum. If abortion is threatened the mother should be put to bed and the bowels moved by an enema, for often disturbances of the intestines produce irritation of the uterus. A mild purge may be given, such as $^1/_{10}$ grain of Calomel hourly, for 5 to 6 doses. The same cleanliness required to be observed in labor is indicated in the care of abortion.

Rest in bed is strongly to be enjoined. Do not encourage the uterine pains in any way, for nature wishes time to render the separation of the placenta less dangerous. Rapid delivery of abortion cases is very apt to be attended with profuse bleeding.

In abortion cases the breasts may make some trouble. If enlarged they should be bandaged firmly and internally, $^1/_{500}$ grain of Atropine may be given for 4 to 5 doses six hours apart.

### LABOR.

The infant becomes viable after the seventh month, and the delivery after that date is called premature labor until at full term, when the denomination of premature labor is superfluous.

Labor at the seventh or eighth month is less desirable than at full term, but the con-

ditions and procedures are the same as at full term, only there is more danger that the placenta will make trouble by being slow of delivery than at full term.

When labor is expected it is well to move the bowels and empty the bladder that these organs do not obstruct the passage of the child. There may be a discharge of bloody mucus called a show, which is very suggestive of oncoming labor.

True labor pains generally begin in the back and extend around the abdomen.

### FIRST STAGE OF LABOR.

While the uterus is being dilated and the pains are severe, but not of a bearing down character, the period of time thus consumed is termed the first stage of labor. The time required to dilate the opening of the womb varies greatly. From a very short while to 6 or 8 hours or even more. The pains are at first cramp-like and not very frequent. Later they become more frequent and more intense. The patient need not be put to bed during this stage, and may with much benefit take hot sitz baths. Allow the woman to walk around the room and to sit in a tub of hot water when she likes. The hot water is soothing and tends to relax the outlet, making the second stage of labor easier. Hot milk and beef tea may be given to keep up

the woman's strength. When the membranes rupture and the waters come away or the pains assume a bearing down character it is time for the patient to go to bed.

### SECOND STAGE OF LABOR.

From the time the pains assume an expelling character until the expulsion of the infant the labor is said to be in the second stage. The position for delivery is preferably on the left side, with the buttox near the edge of the bed. It is not necessary for the woman to lie on the left side during the second stage of labor, but to turn on the left side before delivery.

If the second stage is protracted and the pains seem to have little effect remember that in two ways this is the best. First, the outlet is given time to dilate and tearing is not near so apt to occur, and, second, the condition of the uterus will be better for the prompt expulsion of the placenta in the last stage of labor.

An assistant may place one hand on the abdomen and another hand on the small of the back and materially assist and relieve the efforts of the mother. The mother will often do better if she may hold some one's hands or have something to pull on.

The second stage of labor is usually much shorter than the first. When the pains are

producing the final results and the uterus is contracting after the child the hand of an assistant should follow and hold the uterus until the placenta is delivered.

### THIRD STAGE OF LABOR.

Following the expulsion of the infant there is apt to be a short period of rest for the mother, and she may sleep. The hand of the assistant must not lose the uterus during this time, and if there is any tendency for the womb to get large the hand should knead or rub the uterus through the abdominal walls, and if this does not suffice to produce a contraction of the womb cold water may be applied with the hand to the abdomen while kneading is continued. The third stage lasts until the placenta is delivered, but the holding of the womb through the abdomen and the kneading to keep the uterus hard is not to cease until an hour has elapsed after labor. This precaution to prevent flooding should not be neglected under any circumstances or in no case.

When the placenta is delivered some one should grasp it gently and roll the mass over and over, and by gentle traction withdraw the membranes. Use no force, for if the membranes are broken and remain they may cause after pains or become offensive and most objectionable.

### FLOODING.

Should the expulsion of much blood and rapid sinking of the patient occur give a hot injection of boiled water; give as hot as can be borne and not burn the mother. Powdered Alum may be added to the water, 1 teaspoonful to the pint. *Hot* compresses may be applied to the abdomen. Do not burn, but make them as hot as can be borne. Keep on kneading the uterus. Smelling salts and brandy may be given the mother. Flooding is not the rule and an accident that will seldom occur if the uterus has been watched and kneading after the expulsion of the placenta.

### THE CHILD.

There should be some saturated Boracic Acid solution ready to wash the eyes and mouth and nose with. The eye should be washed out lest some of the discharges of the genital canal may have entered the eye and set up sore eyes that may be very hard to treat. The mouth and nose may be cleansed with gauze from the same solution, but the solution is immaterial. Simply wash the eyes first and then with the same or another sponge cleanse the nose and mouth.

The child should be placed on the right side as soon as born, and for the first few days following birth, that the heart may be

given a chance to become strong. Always follow this rule, for the child's heart at birth undergoes changes which this position will assist. The severing of the cord should be done as soon as the cord ceases to pulsate. Tie the cord about 1 inch from the abdomen. Tie firmly with a small bit of braid, and be sure that no bleeding occurs, for the life of the infant may be endangered by a bleeding cord. The cord should be tied also on the mother's end, lest bleeding from that end endanger the life of a possible twin. Never fail to tie firmly, and tie twice before cutting the cord.

There is no rush about the bathing of the infant. A little oil applied will later make the bath the more easy. The child has come to a colder clime than what he is accustomed to, and it should not be bathed at once, for there is already a tendency to a reduced temperature from without. A little time for the supply of warmth from within is advisable.

The child may rest as well as the mother for several hours before there is any need of nursing. Unless there is a tendency for the womb to relax then the nursing of the child is to be advised, for that act is apt to produce contraction of the womb, and aid, if needed, in the keeping of the womb small until all danger of flooding is over.

Dress the cord with some absorbent cotton and Boracic Acid dusting powder.

### LYING-IN PERIOD.

During the first three days the mother should not be fed on heavy foods or given much tea to drink, lest the digestion be disturbed or the milk come too soon and too much for the child.

A binder is customary among some people, but the good done is very limited indeed.

On the third day there is apt to be a rise of temperature at the time of the filling of the breasts with milk, but this temperature does not last long and is soon back to normal.

If the bowels have not moved by the third day give $^1/_{10}$ grain doses of Calomel for 6 or 8 doses and an enema if necessary.

The mother should be bathed daily, but do not expose so as to catch a cold. The position of the mother is not important. On the back or side, as she may desire. One continual position is apt to be followed by a sagging of the womb to that side, and so the position should be changed from the back to either side. There may be an extra pillow allowed by the end of the third day, but the patient is not to sit up or get out of bed until the uterus can no longer be felt back of the pubic bone. There is a rule to get up on the ninth day, which rule is

erroneous; no patient should get up until the womb is back to what it was before pregnancy. It is safe not to get up before the ninth day, but many should remain in bed longer.

The flow, which is at first bloody, later becomes more clear and finally ceases about the ninth or tenth day, but usually lasts a little longer if the person is on the feet.

After the fifth day the danger of childbed fever is much lessened, and practically over by the end of the first week.

When the mother is delivered there is in the uterus no covering membrane and the womb is as a large surface anywhere without a covering to protect it. Infection may occur as of any wound, but the infection must come as in other wounds, for the most part from without. For this reason meddlesome midwives' fingers in the genital tract during labor or the use of some unsterile household syringe may prove not only useless, but absolutely dangerous.

No one coming from a house where erysipelas, scarlet fever or any of the infectious diseases are existing should be admitted to the lying-in chamber. Should the temperature go up, the pulse become rapid and the abdomen tender during the first week of the lying-in period you would be justified in thinking the womb was infected. It is then

necessary to give one or repeated hot vaginal injections. Boracic Acid may be used in a saturated solution, or, if the case be urgent, the Bichloride of Mercury 1 to 5,000 may be employed. The patient's head may be elevated in order to increase the drainage from the womb.

Aconite may be given, $\theta$, 1 tablet every two hours.

Quinine and whisky or brandy should be given freely if needed as a tonic.

If the Bichloride of Mercury injection is used, do not use too frequently, but between times use the Boracic Acid solution.

Be careful that the syringe and hands and all else are sterile, as you should have been during the whole course of the lying-in period, lest more infection be introduced. The syringe and its nozzle should be always a sterile one, rendered so by boiling or antiseptics.

Always call a physician if possible where there is danger in the lying-in period.

## MUMPS.

Mumps usually appears in epidemics. It is an acute infectious disease, involving the glands of the cheek and the glands below the tongue. Children are more frequently affected than adults, but no age or sex is immune until once they have had the disease, after which, if both cheeks have been attacked, there is little danger of subsequent attacks. After exposure there elapses from one to two weeks before the disease develops. The duration of mumps varies from five to seven days. The disease begins with chilliness, languor and moderate fever. The swelling of the parotid gland is seen below and in front of the ear. The tissues surrounding the gland are also swollen and the cheek has a doughy feel. The glands below the tongue are swollen and the action of the lower jaw is made difficult and painful. There may be an excess of saliva or the amount may be diminished. Sweet things or pickles or anything that will excite the activity of the salivary glands causes pain. The swelling and all the symptoms usually disappear on the fifth day, or they may disappear from face and reappear in the testicle of the male or the mamma in the female, or the disease may go to the ovaries of the female.

TREATMENT.—There is nothing to be done that will cure mumps. It is best to remain indoors and avoid exposure to drafts. The taking of a cold or exposure may cause the metastasis of the disease to the testicle, the mamma or the ovary. Should the mamma or testicle become swollen and painful it is best to bandage and support them in some warm covering. Lead water and Laudanum may be used as a hot, wet dressing to relieve the pain. Should a high fever complicate mumps treat the fever as any other fever.

## MEASLES.

Measles is a disease of an acute contagious nature. Has been known for centuries. Children are most apt to have measles, but neither age nor sex renders a person immune. One attack usually prevents a second occurrence of the disease, but does not always render the individual immune. The disease is characterized by watering of the eye, dread of light, running of the nose, cough and a papular eruption and slight desquamation or scaling.

Measles are highly contagious. The period of incubation is about two weeks, usually a few days less, but there may be a few days

more than two weeks elapse before the disease develops.

The first symptoms are watering of the eye, running of the nose and much irritation of the upper air passages, resulting in cough. During the first twenty-four hours the temperature rises to a little over 100 F. If the temperature is very high at the end of the first day the attack will probably be a severe one. If the temperature is only moderate the disease may not be severe. After the first rise in temperature, or on the second day, the fever may go down to near normal and the child seem better and have a better appetite, but the cough and running of the nose and watering of the eyes increase until about the end of the third day or the beginning of the fourth day, when the temperature rapidly goes up again and the eruption appears on the face. The eruption appears as an efflorescence or reddened patches or papules of irregular shape. The eruption extends to the neck and chest, and thence all over the body, being fully developed in about thirty-six hours. On the face the eruption is the most marked, and it is not uncommon to have the eyes swollen and partially closed. While the eruption is appearing all the symptoms are apt to be increased.

The watering of the eyes and dread of light is worse, the running of the nose and cough

is more pronounced, and the temperature is higher than in the beginning of the disease. There may be disturbances of digestion, with nausea and vomiting, and also there is often a diarrhœa of frequent watery movements.

The eruption becomes fully developed and all the other symptoms reach their height in a few days, the temperature rapidly falls and all of the symptoms improve, and the epithelium is cast off in fine flakes, beginning first on the face and extending over the body in the same order as the eruption appeared.

The complications of measles are of much importance. There is a tendency to lung troubles after measles and much care should be observed lest colds be contracted, which may result in persistent bronchitis or even pneumonia. There seems to be a peculiar weakness of the lungs after measles, making tubercular or consumptive infection very easy. Very persistent middle ear disease may also develop and the child should be guarded from exposure for some time.

TREATMENT.—The patient should be isolated to prevent exposing others. Liquid diet or easily digested food should be given. Medicines are of little service, and are only to be administered where there are some particular symptoms requiring relief. The choice of remedies must depend on the condition calling for drugs. When desquama-

tion begins it is often soothing to oil the surface of the body with some simple oil.

## SORE MOUTH.

Sore mouth may be due to injury to the membranes of the mouth or to the presence of bacteria that cause ulcers in the mouth. The symptoms of sore mouth in general are heat and pain in the mouth and an increase in the flow of saliva. The breath may smell and the child be languid and refuse to nurse, and in severe forms fever may be present.

1. *The simple* form of this affection is characterized by redness of the mouth, and is usually due to a burn or some irritant taken into the mouth. Cleanness is all that is required for its treatment.

2. *The second* form of sore mouth, called aphthous stomatitis, is characterized by small blisters over the tongue, lips and cheeks. These little blisters soon break and form ulcers.

The treatment is simply cleanliness by washing out the mouth with the following solution:

℞. Chlorate of potash, 20 grains. Glycerine, one-half ounce. Water, one and one-half ounces. Mix.

With a piece of cotton or gauze saturated in

the above solution wash out the mouth. As indigestion figures in the cause of this affection, feed the child at regular intervals, and thoroughly empty the bowels by a dose of Castor oil.

3. *Parasitic* form from sore mouth or thrush. This form of sore mouth is due to a specific fungus, and on inspection may be seen elevated patches, which, when removed, leave the raw surface; the patches are found on the tongue and cheeks, and may spread over the entire mouth, and into the throat. There is much soreness of the mouth. The saliva runs from the mouth, and eating is attended by pain.

TREATMENT.—Cleanse the mouth several times a day, and by applying a pledget of cotton to each spot or ulcer the following solution:

℞. Borax, one dram. Glycerine, two ounces. Water, six ounces. Mix.

# MENSTRUATION AND THE DISORDERS OF MENSTRUATION.

## MENSTRUATION.

Normal menstruation is a periodical discharge of blood from the uterine cavity, recurring at regular intervals.

In the majority of cases the period begins every twenty-eight days. A few vary from this rule a day, more or less, but if the period is regular on the twenty-sixth or thirtieth day there is no deviation from health. Menstruation begins at puberty or about the twelfth year of life, and continues until the menopause, or about the forty-fifth year of age. A cold climate tends to delay the appearance of the flow, which may not appear before the sixteenth year.

The symptoms of normal menstruation are more objective than subjective, though few women escape a full, heavy feeling in the pelvic organs previous to the advent of the flow.

The normal period continues from two to eight days, and the quantity of blood lost varies from two to nine ounces. The average period is about four days, and the quantity of blood lost about five ounces. Unless there is a profuse flow there is no clotting.

Young girls should be forewarned by their mothers as to the appearance of the menses, as they may be very much alarmed and resort to rash measures to stop the supposed hæmorrhage; or the scare may result in the disappearance of the flow, or derangement of what should become a regular function. When girls and boys arrive at puberty they should be counseled as to the advent of natural functions and passions, which, if normal and kept in proper limits, insure the physical and mental and the moral development of a man or woman, while on the other hand, if the sexual hygiene be neglected, health and happiness may be sacrificed.

### AMENORRHŒA, OR WANT OF FLOW.

The flow may not appear at puberty, caused by a poorly nourished condition of the system. At times the flow may be absent because of obstruction to the outlet. When the flow is absent as a result of an impoverished condition of the system, the blood will be greatly lacking in the red blood corpuscles, and the patient will have a waxy, greenish, white complexion. There are frequent outbursts of nervousness and hysteria. Mental and physical effort are followed by physical prostration. There will be a desire for sour foods, such as pickles and vinegar, and at time for the earthy substances, such as chalk or charcoal,

while meats will be rejected. The heart is poorly nourished. The pulse is weak, and running up stairs or climbing a hill causes palpitation and faintness. Emotions will also cause palpitation. Headache is common, worse from motion. Pain around the heart is not uncommon. Instead of the flow there may be only a watery discharge, and in some cases there is a watery discharge almost all the time.

TREATMENT.—Improve the general health by giving plenty of fresh air and sufficient exercise; but do not exhaust the patient.

Tonics are often beneficial, such as

℞. Nux vomica, three drops, three times a day.

℞. Potassium iodide, three grains, well diluted in water, three times a day.

℞. Blaud's Iron Pills, one twice a day.

Locally, warm sitz baths with enough brown mustard in the water to make the skin red are very helpful.

The hot douche is the most reliable help. Use two quarts of *hot* water (110° F.). Have the patient lie on the back and flex the legs; retain the hot water as much and as long as possible. Such a douche should last for a half hour. Keep the water hot.

Amenorrhœa may be due to exposure, to cold and wet just before the courses should appear. Sometimes fear or sorrow will pre-

vent the appearance of the flow. Pregnancy is usually associated with a non-appearance of the flow. But in health some even menstruate when pregnant, (such cases are not the rule). Change of climate, as a long sea voyage, may cause the disappearance of the flow for a few months. Serious depleting diseases are followed by absence of the flow. It is evident that when the system is run down and the blood is poor and scant that the flow would be an added drain to the system. In such cases do not try to bring on the flow, but improve the health and blood with tonics.

Where from fear, exposure or accident the flow has not appeared or has stopped too soon, the hot sitz bath, the douche, and the internal use of Actea racemosa, Pulsatilla or Sepia should be tried.

### DYSMENORRHŒA, OR PAINFUL MENSTRUATION.

This term implies menstruation that is performed with difficulty. Pain is a troublesome symptom of such patients. The cause of dismenorrhœa may be misplacements of the uterus, an imperfect outlet, and as a natural result of age on a uterus that has never suffered any other changes than menstruation such is often the case in maiden ladies of advanced years.

The treatment is to remove the cause, which is usually a natural or mechanical one. Medi-

cal assistance may help, and the drugs that should be thought of would be Actea racemosa, Sepia and Asafœtida. Hot sitz baths may be beneficial. This as well as many other female complaints often finds permanent relief after pregnancy. As not all cases are subject to the same causes it is well to place such cases in the hands of competent medical attendants.

### MENOPAUSE, OR CHANGE OF LIFE.

The sensation of the menses is as important as the establishment of the function, and as much care and consideration is as necessary as in early life when the catamenia began.

For a period of about thirty or thirty-three years the pelvis has been subject to repeated engorgement and nervous centralization, and when change of life comes there is a call for a change of outlet for the local activity of the circulation and nerves. The symptoms of this period of change in a woman's life are very marked and greatly varied. There is scarcely a limit to the symptoms that may arise at this time, and the patient should be prepared for many things that in young womanhood do not occur. The courses become irregular in period as well as in amount. Flushes of heat to the head and face or to different parts of the body are common. Headache, vertigo, disturbances of digestion and hæmorrhages from

the uterus and nose are common. Mental depression, loss of memory and loss of power of attention are also common symptoms. The period of change and disturbed nervous and functional symptoms caused by the cessation of sexual life last for a period of from one to two years; but the most marked symptoms occur during a period of about six months in the middle of this time.

There is no need of alarm when this period is reached. The hæmorrhage or loss of blood from the uterus or the nose-bleed that may occur, and at times bleeding from the rectum, all give relief to nature, and the habit that for so long a period has existed, and are more beneficial than detrimental, unless too severe or too prolonged. The care of an experienced physician is to be desired and secured, if possible. If the change is passed successfully the lease on life is extended indefinitely.

TREATMENT.—While the nerves and circulation are struggling with a habit that for years has affected the system so profoundly, and a state of uncertainty seems to prevail, it is but logical that the best of hygienic methods of life should be observed. Keep the skin active by frequent bathing and rubbing with a rough towel. Avoid excitement or over physical strain. Sleep should be encouraged. A warm bath before retiring is a very good way to promote sleep. Regulate the diet to wholesome

easily digested food. Do not be afraid of fresh air and sunshine.

Avoid all alcoholic stimulants. Do not resort to nerve sedative medication, as it often does more harm than good, and may result in a drug habit, fastening itself on the patient. Candies and pastries are to be eaten in moderation.

Sepia, Actea racemosa, Pulsatilla, Asafœtida and other remedies named in this treatise should be studied as possible remedies for some of the nervous and physical phenomena.

## NEURALGIA.

Pain radiating along the course of a nerve trunk is called neuralgia. The causes are numerous. Nervous temperament and heredity, overwork and general exhaustion are predisposing to neuralgia.

Rheumatism, gout, lead poison and disease of the nerve trunks or nerve ganglia are persistent causes. Exposure to sudden changes of temperature often excite an attack.

Depression of spirits and tingling in the part affected often precede an attack. Sharp stabbing pain in the part with tenderness along the course of the nerves are always prominent symptoms. The attack may last from a few hours to a few days.

Following an attack of neuralgia there is apt to be profuse urination of clear or pale urine.

Neuralgia of the nerves of the face is very common, and may be caused by decaying teeth, or disease of the nerves, or of the ganglia from which the nerve springs.

Intercostal neuralgia is a common affection of the chest. Has a tender spot near the spinal columnn where the nerve is given off, and a line of tenderness under the rib along which the nerve lies. Sciatica is but a form of neuralgia, and has for the prominent symptom pain along the course of the sciatic nerve.

TREATMENT.—The treatment of neuralgia will of necessity be directed to the cause. Locally, much relief may follow the use of hot applications, and liniments that have an irritant action to the skin. Tr. aconite and Tr. arnica may be used in equal parts and painted along the course of the painful nerve. Tr. iodine may be used as an application to the painful area. Belladonna plasters at times afford relief. Avoid opiates, as there is the greatest danger of forming the opium habit

## NOSE-BLEED.

Nose-bleed may be caused by injury, and by obstruction of the circulation such as chronic heart and lung disease. Certain affections of the blood and the onset of some of the fevers have nose-bleed as a symptom. In crossing mountains where the atmosphere is light nose-bleed occurs. At times without any apparent cause bleeding may develop. When nose-bleed is associated with a blow or injury to the head it may be an indication of fracture of the skull, if the nose was not injured by the blow.

TREATMENT.—Apply ice cold water to the back of the neck and to the nose. Snuffing up into the nose alum solution, of one drachm of alum to four ounces of water, is very effectual where there has been direct injury to the nose, or a pledget of cotton saturated in this solution may be applied or packed closely into the bleeding nostrils.

Adrenalin, Chlorid, used as a spray, is often very effectual.

At times nothing will stop the flow of blood from the nose except careful packing of the nasal passage with gauze or cotton.

Association with headache or congestion of the head and face, nose-bleed is often beneficial unless too profuse.

## PALPITATION OF THE HEART.

CAUSES.—Palpitation is a symptom of organic heart disease, of dyspepsia and the result of certain drugs in their action on the system. Palpitation is also associated with anything that will for the time unbalance the nervous equilibrium, such as joy, fear or anxiety. Disturbances of the reproductive organs often cause palpitation; this is more frequently noticed in girls than among boys.

SYMPTOMS.—A violent action of the heart perceptible to the patient, and noticeable to any who may examine the pulse or listen to the heart. There is no rule as to frequency of the heart beats, as different cases differ in this particular.

TREATMENT.—If the palpitation is aggravated by the use of tobacco, tea or coffee, stop their use. If tobacco, tea or coffee disturb the harmony of the functions or organs of the body, they are drugs to that individual and should not be used in health. Where the digestion is at fault or the heart diseased, besides the treatment of these ailments, the following has been of value:

℞. Tr. nux vomica, one drop, three times a day; *give on sugar or tablet;* also, ℞. Tr. aconite, one drop, three times a day, has been of service for many nervous cases; give on

sugar or in tablet; also, ℞. Asafœtida, three grains; Ext. nux vomica, one-fourth grain pill. One in the morning and one in the evening.

This latter prescription is especially of value for nervous girls or women. For the Eskimo women of Alaska who are troubled with the heart symptoms and fainting spells, or hysterical seizures, this is probably the best medicine to give them, as it quiets the nerves and at the same time assists the heart and the digestion.

Pulsatilla in the homœopathic preparation given in the tincture ranks as one of the first drugs for girls about the time of puberty who are troubled with palpitation. Give one or two drops three times a day. There are various drugs given according to Homœopathy for this trouble, but to give them in a proper manner consult the indications given for the drugs.

## PNEUMONIA.

The lung may become inflamed from a variety of causes, but the most common as well as most dangerous is that form called croupous pneumonia. This form is sometimes spoken of as the natural end of the old man, as so many of the aged die from it.

## CROUPOUS PNEUMONIA.

Croupous pneumonia is an acute specific disease, due to a special organism, and is characterized by an inflammation of the lungs. High fever, cough, "rust" colored sputa, shortness of breath and pain on breathing.

CAUSES.—A specific organism which thrives only when the vitality is lowered by pre-existing disease or any strain that reduces the general health. Exposure to cold and wet frequently brings on the attack. One attack predisposes to subsequent attacks.

### PATHOLOGY OR COURSE OF THE DISEASE.

The disease has three stages. The first stage is one of congestion of the lung. The small blood vessels called capillaries are distended and permit a slight exudate, and the lung is hardened.

In the second stage the hardened lung becomes infiltrated with blood and is of a deep red color, and so heavy it sinks in water.

The third stage is one of resolution by absorbtion of the part of the exudate and expectoration of the balance, or the lung may change from red to gray; that is, the exudate changes from blood to pus; the lung becomes inltrated with pus and the patient dies practically from blood poisoning. Or early in the disease death may be caused by diminished air space.

The two extremes of life succumb to this disease readily. The consolidation of the disease usually begins in the lower lobe of the right lung at its base and spreads upwards. The pleural membrane and the adjacent bronchial tubes share the inflammation of the lung.

SYMPTOMS.—The disease generally begins with a decided chill and a sharp pain in the side. The temperature within the next twenty-four hours reaches a maximum of 104 or 105 degrees F., at which point with slight daily remissions it remains until the crisis, which usually occurs about the ninth day. The fall of the temperature is so rapid that on the tenth day it may be normal. In atypical cases the temperature may gradually go back to normal. Breathing is difficult. The respirations are shallow and rapid, advancing from the normal of 18 per minute, to 40 and even 60 to a minute. The pulse is raised to 120 per minute or more, but not in proportion to the breathing. Normally the heart beats 4 times to 1 act of respiration, but in pneumonia the ratio may be reduced as low as 2 to 1. Cough is a prominent symptom, which at first is short and dry, but later the sputa has a rusty appearance from the blood it contains. The sputa may be very tenacious, stringy and exceedingly hard to expectorate. The face is flushed, the lips dark blue and frequently

there are fever blisters on the lips. The tongue is furred, the bowels constipated, the urine scant and high colored, and when tested with Nitrate of Silver solution does not throw down a white precipitate; this shows a lack of the chlorides, and when the precipitates begin to appear a change for the better is usually at hand.

Delirium is also a common symptom. During the course of the disease the chief sound that can be heard on listening to the chest is bronchial breathing or the sound of the air as it rushes back and forth in the larger air passages. If the patient speaks over the area affected the sound is increased and near to the ear; later in the disease or in the third stage fine, moist rales can be heard.

In the aged the symptoms of pneumonia are not typical. The temperature may not be high at first; delirium, however, is common and prostration very marked. In children the onset may be marked by convulsions, headache, delirium, drowsiness and very high temperature. Expectoration is absent at first.

## PLEURISY.

Stimulates pneumonia, but does not have the rusty expectoration. The chill is less marked and the temperature not so high and the breathing is distant and weak. Severe pain in the side is the most marked symptom of pleurisy. The fall of temperature is not as marked in pleurisy as in pneumonia. The prognosis of pneumonia is grave at either extreme of life. In the young and strong the prognosis is usually good. The average ratio of death is one case out of five.

TREATMENT.—Absolute rest in bed. The diet should be liquid and such articles as eggs and milk or broth of meat or game may be given. The chest should be enveloped in some warm material. The disease is self-limiting and runs a course that no remedy can cut short. The object would be to sustain the strength of the patient until the disease has had time to run its course. When the crisis of the disease comes the temperature falls at once and the patient should be watched well lest the fall in temperature be so great as to cause the patient to die from the exhaustion at this most critical time. At about 2 o'clock in the morning there is a natural fall of temperature, and should the crisis occur at this hour the danger is in-

creased. During the course of the disease there may be need of Alcoholic stimulation, but at the time of the crisis there is a great probability that stimulation will be called for, especially if the fall in temperature occurs early in the morning. Should the temperature fall at any time, and it will surely fall about the ninth day, and collapse seem near, there is urgent need of Alcoholic stimulation.

During the disease constipation should be overcome by mild cathartics or by enæmata.

Baths if given must be performed under a blanket and every care and caution taken not to expose the patient lest a cold be taken.

While pneumonia is regarded as not contagious it is by far the safer policy not to allow those suffering from a cold on the chest to spend too much time in the room. The sputa, of course, should be burned or properly disposed of. The germs are in the sputa and perhaps in the air, and undue exposure of those suffering with a cold or bronchitis is to be guarded against.

## RING WORM.

Ring worm is caused by a vegetable parasite affecting the skin. Ring worm may develop on the scalp, face or any part of the body. The disease may be transmitted from man to man or from the lower animals to man.

The disease begins with one or more rounded elevated gray scaly patches, through the center of which project dry, brittle or broken hairs. The center may heal, but on the margin the disease spreads in a rounded or circular manner.

Eczema may resemble ring worm, but the hair is not broken off, nor are the scales round. Eczema does not heal in the center and spread on the edges, and eczema has intense itching, while ring worm has not.

TREATMENT.—Remove all scales. Pull out the hair on the face or body, or if on the scalp shave the affected area. Rub in well twice a day one of the following ointments:

℞. Acid Salicylic, 30 grains. Sulphur Præcip., 1 drachm. Vaseline, 1 ounce. Mix well and rub in well twice daily.

℞. Ammoniated Mercury, 20 grains. Vaseline, 1 ounce. Mix well and rub in twice a day.

℞. Blue Ointment. Rub in well twice a day.

The parasite of ring worm lives at the root of the hairs and the disease is sure to last until the germs are all destroyed.

## RICKETS.

Rickets or rachitis is a disease of early childhood, and is characterized by poor nutrition and defective development of the bony structures of the body. The symptoms are restlessness and fever at night, tenderness and soreness of the body and especially is there soreness and tenderness about the joints. Profuse perspiration about the head. The fontanelles or natural unclosed parts of the skull are long in closing. The teeth slow in coming, and the teeth may be unnaturally formed. There is apt to be knock-knees or bow-legs. There may be curvature of the spine. The chest is apt to be distorted and the condition known as chicken-breasted often exists.

This diseased condition is due to improper nutrition and a lack of the lime salts.

TREATMENT.—The health of the child must be improved and the digestion encouraged Eggs, milk and meat should be given freely in sufficient quantities. Fresh air and sunshine are two very advisable additions to good feeding.

There is much good derived from the administration of tonics. Calcarea carbonica is a very good remedy, and will do much for such patients. Lime water as is ordinarily secured from the drug store may be given with the milk.

## RHEUMATISM.

Acute articular rheumatism is an acute disease of the system and is characterized by a fever that is not regular, inflammation of the joints and acid perspiration. The heart may be involved and chronic heart disease result from rheumatism.

The cause is probably an impurity in the blood. The decomposition and removal of waste matter from the body may be impaired and the substances absorbed by the blood act as the exciting cause. There seems to be less likelihood of the germ theory being applied to rheumatism as a cause of the symptoms than to other affections, but even this may be true.

*The symptoms* may follow a spell of chilliness, languor and sore throat, or appear abruptly, with swelling of any of the joints and intense pain. The knee, shoulder, elbow and wrists are most frequently attacked. The pain may disappear in one joint and reappear

in another. There is apt to be moderate fever and at times very high fever may complicate the disease. The sweating is often profuse and of a sour odor. The tongue is coated and the appetite lost, and the bowels constipated. The urine high colored and throws down an abundant sediment.

TREATMENT.—Rest is of first importance in treating rheumatism. Cover the affected part with a woollen dressing. Allow plenty of fresh air in the room, but do not expose the patient to a draft. Liquid diet is preferable to the heavier foods. Encourage digestion, avoid meats. and pastries.

Lithia tablets or drinks are of value. Salicylate of Sodium, in 10 grain doses, three times a day, will often reduce the pain. Applications of hot water with a little oil of gaultheria or oil of turpentine may be applied. Lead water and Laudanum may relieve if used locally.

There is often a painful affection of the muscles, and known as muscular rheumatism. Exposure to wet and cold is usually the direct cause. Those with a rheumatic tendency are apt to have muscular rheumatism. Muscular rheumatism may affect the neck and produce twisting of the head to one side; there will be much pain in the muscles of the neck on motion. Rheumatism of the muscles of the back is usually called lumbago, and is greatly ag-

gravated by motion. Rheumatism of the muscles of the chest has severe pain accompanying the act of breathing.

TREATMENT.—Rest is of first importance. Belladonna and Camphor liniments may be rubbed well into the parts. There are many liniments that are of value for muscular rheumatism. Any counter irritant will usually afford relief for a time at least. Porous plasters have won quite a reputation for relieving the pain of rheumatism. Internally Dulcamara, Gelsemium, Bryonia, Arnica and Chamomilla may be given, as the indications may call for these remedies.

## SCARLET FEVER.

Scarlet fever is an acute contagious disease characterized by high fever, rapid pulse, sore throat and a scarlet rash of the body. After exposure the disease may develop within a few hours, or in a few days, usually within the first week. The poison of scarlet fever is hard to destroy and clothing may transmit the disease after years of disuse. One attack does not render the patient immune, but those who have had the disease are less liable to acquire the affection than those who have never had it.

The disease begins suddenly. The child

feels sick, looks pale, is nauseated and may vomit. The throat is sore and the pulse is rapid, and the temperature is usually high (105 F.). Convulsions often are present at the onset of scarlet fever. If the temperature is high at once and all the symptoms are very marked the case will likely be a severe one.

The temperature continues to rise from the beginning for about twenty-four hours or until the eruption appears. The eruption appears on the neck first and looks like little spots sprinkled over a bright red skin surface. From the neck the rash extends over the chest, and then over the entire body, as well as upward over the face. The rash of scarlet fever disappears on pressure and slowly regains its color after the finger has been removed, and a line drawn by the fingernail remains white for a short time. The throat is painful and swallowing is difficult. The glands below the tongue are swollen. The tonsils and soft palate and walls of the throat are deeply injected and red, and may even be covered with a membrane. The tongue at first is coated, while the edges and tip remain clear and red. In a few days the coating of the tongue disappears and the little papilla of the tongue are seen to be prominent, making a strawberry appearance.

The fever of scarlet fever rises abruptly for the first twenty-four hours and continues high

for three or four days, and then gradually falls to normal. The pulse and breathing are both much increased, more than the severity of the other symptoms would indicate. The appetite is lost and the patient is restless, unable to sleep and often delirious. Headache is usually present. There is a great tendency in the latter stages of scarlet fever to involvement of the kidney. The urine is scant and high colored.

In acute sore throat there are many symptoms resembling scarlet fever, but the fever is not so high and the pulse and breathing not much increased. In measles the throat is not to severely attacked; the rash of measles appears later and begins on the face instead of the neck and the fever falls after the first day, to rise on the third or fourth day. In diphtheria the symptoms do not appear as rapidly as in scarlet fever and there is great prostration; a false membrane is always present and there is no skin eruption in diphtheria.

TREATMENT.—The patient should be isolated. Rest in bed is imperative. The surface of the body should be anointed daily with some pure oil or cold cream or carbolized vaseline. The food should be liquid and the throat should be kept clean by a spray of listerine, diluted in water; or Permanganate of Potash may be used, ½ grain to a half glass of water, as a gargle.

If there is high fever it is best to reduce it by giving a sponge bath, using gradually cooler water as the bath is given. This bath to be under blankets and free from all exposure. Aconite, Belladonna and Lachesis may be given internally as symptoms may require. The bowels should be kept moving or not allowed to become constipated. Water may be given freely.

## SMALL-POX.

Small-pox is an acute contagious disease characterized by an eruption, which is at first papular or of pimples, then vesicular or small blisters, and finally pustules. *Intense pain* in the lumbar region of the back is always present. The fever subsides partially on the fourth day and again reappears on the seventh or eighth day, and lasts with intermissions during the pustular stage. The more the pustules, the more marked the fever.

The germ of small-pox is very hard to destroy and remains virulent for many months on clothing and other places where it may have been deposited from the body of one affected unless disinfection has been very thorough. No age or sex is immune unless protected by a previous attack. Vaccination may not render a person immune, yet those

who have been vaccinated do not contract the disease as readily as unvaccinated persons, and if they do contract the disease the dangers and course of the disease are reduced and the symptoms are much more mild than among unprotected persons.

After exposure the period of incubation is about twelve days before the disease appears.

Small-pox usually begins with a chill or with chills, vomiting and intense pain in the lumbar or lower region of the back. The temperature goes to 104 F. in the first twenty-four hours and remains high for three or four days. The pulse is quick and full. In children the disease and fever is apt to begin with a convulsion.

Chills followed by vomiting and intense pain in the back should lead one to suspect small-pox.

The temperature, which has been high for three or four days, lessens and is not a prominent feature of the disease until about the eighth day, for after the eruption is all out and the vesicles are turning into pustules then the temperature again rises in proportion to the number of pustules. After pustulation the fever fluctuates for a few days and gradually disappears.

The eruption of small-pox appears about the third or fourth day in the form of red

spots on the forehead and along the margins of the hair and also on the wrists. The red spots rapidly change into smooth, round pimples, which feel like shot under the skin. Within twenty-four hours the eruption appears on other parts of the face, on the limbs and on the trunk. As the eruption appears the fever subsides and the patient is more comfortable. About the sixth or seventh day of the disease, or about three days after the appearance of the shot-like pimples, the eruption changes into vesicles or small, clear blisters that are depressed in the center or umbilicated. On the eighth day, or one or two days after the vesiculation or blistering, the vesicles change into pustules. They first become milky in appearance and then lose the umbilicated appearance. The fluid finally becomes more turbid and is changed into pus. Between the pustules there is apt to be swelling and the features may be greatly changed. The fever becomes high again with the development of pustules. In about three days after pustulation the pustules break and emit an offensive odor and form soft yellow crusts, which adhere to the skin for six or eight days and then fall off, leaving permanent pock marks where the pustules were developed.

In some cases the eruption may be scattered and in others the eruption may run together and form large crusts and sores. The

larger and deeper the pustules the more severe the case.

There may be a fetor of the breath and cough due to the development of the lesions within the air passages.

### VARIOLOID.

Those who have been vaccinated develop only a mild form of small-pox, to which the name of varioloid has been given. One who has not been vaccinated may contract small-pox in its severest form from a mild case of varioloid.

The protection guaranteed by vaccination is more in the lessening of the severity of an attack than the rendering of the individual immune to the disease, though vaccinated persons are less liable to contract the disease than unvaccinated ones.

The symptoms of varioloid are the same as those of small-pox, but much more mild in degree.

TREATMENT.—Preventive treatment in the form of vaccination is to be recommended for every person young and old. When a case develops in a house every member of the household should be vaccinated at once. The patient should be isolated in a room that is *cool* and well ventilated. The diet should be of easily digested food, or be of liquid food. Plenty of water or acid drinks should be al-

lowed the patient or encouraged if necessary. If the stomach is irritable Bismuth may be given 5 to 10 grain doses. The nose and throat should be kept clean by sprays and gargles. If the pulse becomes weak give stimulants. Cleanse the eyes several times a day with a saturated solution of Boracic Acid. If the fever becomes dangerously high there may be need of cold sponging to reduce the fever. Sponge under cover and gradually reduce the temperature of the water.

When the pustulation takes place the room should be kept darkened and cool. Cloths wrung out of a mild Carbolic Acid solution will be soothing to the face, or carbolized vaseline may be used as a dressing to prevent deep pitting of the face.

## SCURVY.

The essential cause seems to be due to an insufficient diet of fresh fruit and vegetables. Scurvy has been known from the earliest times and has prevailed particularly in mining and army camps and among sailors. The disease develops among those who have subsisted for a prolonged period on a diet which is lacking in fresh vegetables or their substitutes. The blood is changed to a dark red and has a tendency to infiltrate the various tissues and

organs of the body. Hæmorrhages occur into the internal organs, the mucous membranes and the skin.

SYMPTOMS.—Early there is pallor and progressive weakness. The gums become swollen and bleed easily and the teeth become loose or fall out. The tongue becomes swollen and coated and the breath is very offensive. The mucous membrane of the mouth may have blood blisters varying in number and size. The skin is dry and harsh. Blood spots appear on the legs and then on the arms and body, and resemble the bites of a flea, only that the spots begin around the roots of the hair. When the extravasation of blood is marked there may be some swelling due to these blood spots. Swelling or dropsy about the ankles or knees is quite common. Nose bleed is frequent, and at times blood may be passed from the bowels. Constipation or diarrhœa may either one be present, the appetite lost, the mind become depressed and gloomy; headache and delirium are not uncommon symptoms.

TREATMENT.—The object in treating scurvy is to supply the system with the articles of food that have been lacking in the diet of those affected. Fresh vegetables, the acid fruits, such as lemons and oranges and berries, may be given first place. The tender grass roots from the marshes have been used

with marked benefit and a tea made from the bark or needles of the spruce tree has helped many a miner and Eskimo. Willow buds have been used with much benefit by some. Fresh meats are very much to be desired, as well as fresh vegetables. Lime water should be given if obtainable, and may be given with milk or as the patient prefers, 2 or 3 tablespoonfuls with each meal. The mouth of all patients suffering with scurvy should be kept clean. The various mouth washes given for sore mouth may be used or the mouth cleansed with a cherry red solution of Permanganate of Potash.

### INFANTILE SCURVY.

Bottle fed infants or nursing babes where the mother has been deprived of fresh vegetables for a continued season are predisposed to scurvy.

SYMPTOMS.—Progressive pallor, loss of appetite, profuse sweating, especially about the head; slight fever attacks at times, and a sensitive condition in the bones, especially about the joints. The child cries when the affected limb is touched. The pain in the limb may be mistaken for paralysis. The child is afraid to be handled on account of the pain. If the child has teeth the gums will have the characteristic symptoms. Slight blood spots may be seen on the forehead and in the mouth.

TREATMENT.—The change of food to fresh milk and the juice of one orange a day is all that is necessary to bring about rapid recovery. Where fruit cannot be had fresh berries may be substituted, and if the babe is nursing any fresh vegetable given to the mother will supply all that is needed in the milk.

## THE SKIN.

The skin of the body protects the tender structures beneath from injury and prevents the entrance of poisonous substances from without when brought in contact with the body. The skin will absorb medicines or poisonous substances if applied in the right form as ointments, salves, etc. The skin excretes much waste matter from the body and should be kept active and clean. The sweat ducts may become clogged and give rise to pimples and comedones. When freely perspiring one should not go at once into the open air or into a draught, as chill is likely to stop the action of the sweat glands and send back the waste matter that should have been thrown off by the skin onto the other excretory organs to dispose of, thus making extra work for the lung, kidneys and bowels. A condition of disturbed excretion of the skin, associated with irritation of the lungs

and bronchial membranes, constitutes what is commonly known as a cold.

## TONSILLITIS OR QUINSY.

Quinsy occurs at all ages, but is most common during young adolescence. Exposure to cold and damp usually brings on an attack. After exposure the throat becomes sore, there is pain at the angles of the jaw, which is aggravated by chewing, talking and swallowing. Chills, fever, headache and a general tired ache of the whole body is often present. The tonsils become swollen, and the crypts are filled with a creamy exudate, and the tonsil presents a spotted appearance. In diphtheria the tonsils are covered with a gray membrane, which is uniform and not dotted over the tonsil. The diphtheritic membrane creeps up along the walls of the throat to the soft palate, while the spots of tonsillitis remain on the tonsils. The patches of tonsillitis leave no raw surface when removed as does the membrane of diphtheria. In tonsillitis the tongue is furred and the breath has a foul odor. The urine is scant and high colored.

TREATMENT.—Early where there is chill give θ Aconite, 1 tablet every half hour for five or six doses.

Where the throat is very sore and the con-

stitutional symptoms are few give θ Guaiacum, 1 tablet every one to two hours for a day or two. Painting the tonsil with baking soda or Soda bicarbonate will often afford relief. Paint every two or three hours.

Gargle the throat three or four times a day with the following:

℞. Borax, 1 drachm. Glycerine, two drachms. Water, eight ounces.

A simple and efficacious gargle may be made by adding one-half grain of Potassium Permanganate to a glass of water. Gargle the throat frequently.

## QUINSY.

The neck may be painted with Tr. Iodine once or twice a day with some benefit.

When in tonsillitis or quinsy the tonsil is much swollen and chill and fever is present with difficult swallowing, 1x Hepar sulphur, 1 tablet every hour, will hasten the opening of the abscess which is forming in the tonsil. Hot poultices will be very grateful to the patient, relieving much of the pain.

### THROAT REMEDIES AND INDICATIONS (DR. H. S. WEAVER).

In catarrhal conditions of the nose, where there is discharge or crusts, cleanse by spray-

ing or drawing into the nose from the hand a solution of salt in water, one-half drachm to one-half glass of water. Follow the cleansing of the nose with an oily spray such as: ℞. Menthol, ten grains. Acid carbolic, five grains. Oil Eucalyptus, one-half drachm. Fluid Alboline, two ounces.

## SORE THROAT.

Belladonna is indicated where the throat is red and inflamed, the skin dry and hot, headache and the face is flushed or red. Give Belladonna 1x, one tablet every two hours.

Guaiacum is indicated where the throat is sore, red and inflamed, but the patient is not feverish as he is when Belladonna is needed. There may be some rheumatic symptoms. Give Guaiacum θ, one tablet every two hours for one or two days.

Mercurius iodatum rubrum is indicated when the tonsils are full of patches, showing a distinct tonsillitis.

Give 2x, Merc. iod. rub., one tablet every hour, alternating with Belladonna as indicated above, which is to be given every two hours.

Hepar sulphur is indicated in quinsy when the tonsil is red and swollen, with sticking pain on swallowing.

Give Hepar sulphur 1x, one tablet every alternate hour with Guaiacum as indicated above. Early in quinsy these two drugs may abort an attack of quinsy.

Aconite is indicated where there is cold in the head with rapid pulse and chilliness of the body. The skin is hot and dry. There is fever and restlessness.

Give θ Aconite, one tablet every hour for five doses.

Gelsemium is indicated where there is chilliness alternating with fever. A great deal of sneezing and headache in the back of the head or pain in the eyeballs. Gelsemium is especially good when the cold is beginning. Give θ Gelsemium, one tablet every hour.

Arsenicum album is indicated where there is much watery discharge from the nose, which excoriates the nostrils and makes the nose burn and look red. There is also sneezing and great thirst with dryness of the lips.

Give 3x Arsenicum alb., one tablet every two hours.

Euphrasia is indicated where the eyes water and burn, along with other symptoms of cold in the head. Give 2x Euphrasia, one tablet every hour.

Pulsatilla is a prime remedy when the discharge from the nose has become thick and is of a greenish color.

Give θ Pulsatilla, one tablet every two hours.

GARGLES.

Potassium permanganate, one-half grain to a tumbler full of water, makes one of the best gargles for tonsillitis and diphtheria.

For simple inflammation of the throat or tonsils and pharynx use—

℞. Alcohol, Glycerine, Hamamelis fl. ext., Water, aa, equal parts. Used as a gargle is very soothing.

APPLICATIONS.

In chronic catarrh or sore throat the throat may be painted with the following:

℞. Glycerine, one ounce. Tr. Iodine, five grains. Mix, and apply with brush.

## CATARRH OF NOSE AND THROAT.

Chronic catarrh of the nose and throat is very often the result of repeated attacks of acute nasal catarrh. Mouth breathing is very apt to set up a chronic catarrh of the throat. There is apt to be clogging of the nasal passages. Crusting of the discharges in the nose. Hypertrophy of the mucous membrane of the nose. Persistent discharge that is tenacious and perhaps offensive. There may be involvement of the vocal cords when the catarrh travels down the air passages.

TREATMENT.—The nose should be cleansed by drawing into the nostrils a solution of soda water or salt water, one drachm or one teaspoonful to a pint of water. Cleanse the nose thoroughly but do not blow the nose for some time after drawing the solution into the nostril. The tendency is to blow the nose, but the danger is to force the solution into the tubes leading to the ears if the nose be blown. Nasal sprays that will reduce the inflammation are valuable.

Internal medication is of much value. Hydrastis Canadensis $\theta$, one tablet, three times a day. Where the discharge is stringy and tenacious and yellow in color. Hepar sulphur 4x, one tablet three times a day, may be serviceable where the discharge is purulent and the breathing is obstructed.

It is well to look up the different remedies and choose the one that is most indicated.

Avoid mouth breathing, and if possible consult some good physician.

## PHARYNGITIS, OR SORE THROAT.

The causes of sore throat are much the same as those of quinsy, exposure to damp and cold usually causing an attack. The onset is often accompanied by chills and fever and a red, swollen and painful throat. There

is tickling and dryness of the throat and soreness on swallowing. There is a constant desire to cough or cleanse the throat. Hoarseness, loss of voice and impaired hearing are apt to be present.

TREATMENT.—The same local treatment as that used in quinsy is applicable. The bowels are often constipated and should be moved. θ Aconite, one tablet every hour for six doses, where there are chills and fever. 1x Belladonna, one tablet every hour where the throat is red and inflamed and the skin dry and hot. θ Guaiacum, one tablet every two hours, where the throat is sore and there is little else of which the patient complains.

Painting the neck with Tr. Iodine is often good in sore throat and in quinsy. A little coal oil sprinkled on a cloth and tied around the neck until the skin is red but not blistered will often help.

## CHRONIC SORE THROAT.

For chronic sore throat the throat may be painted every few days with the following:

℞. Iodine, five grains. Glycerine, one ounce. Paint with brush or swab with a little cotton in a forceps.

The following may be used instead of the Iodine preparation:

℞. Acid, tannic, ten grains. Glycerine, one ounce. Paint the throat every three days with brush or swab.

In acute sore throat use Zinc chloride, ten grains, to one ounce of Glycerine. Paint the throat daily for four or five days.

## TYPHOID FEVER.

Typhoid fever is an acute infectious disease, caused by the presence and action of a bacillus in the intestines. The characteristic symptoms are fever and headache, stupor and dull, heavy expression of the face, abdominal distension with spots that develop on the abdomen about one week after the onset of the disease. Diarrhœa of a yellow color is very common. The period of incubation is from two to three weeks. The disease lasts from three to six weeks.

There are always ulcers of the small intestines no matter how mild the attack. The mildest case is in danger, and there is hope of the most severe to recover.

The disease begins with vague pains over the body, languor and weakness, headache, nose-bleed, bad taste in the mouth and furred tongue and diarrhœa.

The temperature rises a little higher each day until the seventh day in some cases, and in

others gradually rising until the fourteenth day. One-third of the time is consumed until the fever reaches its height, or about 105° F. One-third of the duration of the attack the fever remains high, and the remaining third is marked by a gradual lessening of the daily fever height. The daily variation in the fever is from two to three degrees. In the afternoon and evening the fever is higher than in the morning. In protracted cases the daily variations or remissions are not very marked. A marked and rapid fall in the temperature may indicate intestinal hæmorrhage or rupture of the intestine into the abdominal cavity. The face of a typhoid patient is dull and heavy, the cheeks often flushed and the pupils dilated. There is slowness of thought, and answers come slow and often as if the patient had forgotten the question. Headaches and stupor with impaired hearing are almost always present. Sleeping with the eyes open, muttering delirium and picking at the bedclothing or at imaginary objects may develop during the disease. The breathing is more rapid than usual, but not as frequent as would be expected from the height of the fever. There is apt to be present a slight cough. The pulse becomes rapid and weak, but is not as rapid as would be expected with a high temperature. The cause of all the symptoms is found in the intestines, and we should look

to the digestive organs for the confirmation of our diagnosis. At first the tongue is tremulous and coated white, except the edges and tip, which are red and free from any coating. Late in typhoid the tongue may be coated dark brown and fissured, and a deposit form on the teeth. The patient usually has little or no appetite, though food is seldom rejected by the stomach. In some cases vomiting may develop. The abdomen is always distended with gas, and may be tender. Rumbling or gurgling may be present. Diarrhœa is very common, though not always present. The movements are yellow, and on standing separate, a scum rising to the surface and a yellow sediment remaining below. If constipated, the yellow color is apt to be present. The movements are offensive whatever their nature may be as to constipation or diarrhœa.

About the end of the first week from the onset of the symptoms there appear on the abdomen spots like flea bites, or reddened, slightly elevated spots, which disappear on pressure.

Always look for the enlarged abdomen and the spots by the end of the first week. The urine is scant and high colored.

During convalescence the hair is apt to fall out.

IRREGULARITIES.—At times all the symptoms

disappear in a few days. Some cases are so mild that the patient refuses to go to bed, but the danger is there until the intestines have had time to become free of the germs and healed of the ulcers.

Children may have a high temperature at once and violent delirium or threatened convulsions, and, though the abdomen becomes distended, the characteristic rash may be absent. Relapses in typhoid fever are not infrequent, and are usually not as severe as the original attack.

Temporary elevations of temperature during convalescence may be due to constipation or improper feeding.

TREATMENT.—There is no disease where rest in bed is more indicated. The patient is not even to get out of bed to move the bowels, but must use the bed-pan. The intestines are uclerated, and exertion or improper food may cause a fatal result by rupturing the bowel into the abdominal cavity. The movements should be burned or disinfected by some strong antiseptic. Soiled articles of dress or bedding should be thoroughly boiled. The nurse and family should know that it is the discharges from the body that are infectious, and use every precaution not to infect others.

No solid food can be given lest the ulcerated

intestines rupture as a result of such irritation. Liquid diet is indicated throughout the disease, and after recovery for some time, because the appetite is very strong after recovery, and this caution is doubly imperative lest the eating of solid food be too much for the intestines that are not yet well. More than one person has died from eating too much and too solid food during convalescence. Milk is the best food. To the milk brandy may be added if the circulation and digestion is poor. Beef tea and meat broth may be given to vary the diet. Water may be given as much as desired, and if not desired it is desirable to give water at any rate at regular intervals. If constipation should be present the bowels should be moved by enemata, and by small doses of Calomel. High temperature may be reduced by the gradual cold sponging under woolen blankets. It may be advisable to check a diarrhœa by giving Bismuth subnitrate in ten-grain doses, repeated two or three times a day. Heart failure, constipation, high fever and delirium must be met as the occasion demands.

The drugs, Bryonia, Aconite, Hyoscyamus, Baptisia, Quinine, Whiskey, Calomel, and Strychnine may, one or more, be indicated during the course of the disease, and should be given as occasion and indications require.

## TOOTHACHE.

Before placing anything in an aching cavity remove all particles of food and thoroughly cleanse the cavity. Saturate a small piece of cotton with one of the following solutions and place it in the cavity; put over this a small piece of dry cotton:

℞. Tr. Aconite, one drop on cotton, apply to nerve in cavity and cover.

℞. Cocaine muriate, four per cent. solution. Laudanum, Chloroform, equal parts of each of the above.

Saturate a small piece of cotton and apply as before, or instead of the above, saturate the cotton with Oil of Cloves or Camphor-Phenique, and apply as before stated. Instead of the foregoing the cavity may be cleansed and a small piece of toothache gum may be placed in the cavity.

## THE TONGUE.

The tongue is worthy of some study, as it is indicative of several disorders of the system. A thick, flabby, gray-coated tongue that shows the imprints of the teeth indicates disturbances of digestion in general, and is also noted in connection with appendicitis. In

brain diseases the tongue may be sharp-pointed, tremulous and difficult of motion, and in some lesions of the brain the tongue is always protruded to one side. An immobile tongue or one that always protrudes to one side indicates paralysis due to pressure or injury of the nerves of the tongue or to brain tumor. The sharp red tongue is common with brain fever. In typhoid fever the tongue is coated from gray to very dark, depending on the time and state of the irritation of the intestines. Indigestion has a gray-coated tongue clear on the edges.

## NORMAL TEMPERATURE.

The normal temperature of the body is from 98 to 100 degrees F. During sleep there is a slight fall of the temperature amounting to 1 or 1½ degrees. Elevations of temperature are common, and are associated with many affections. Elevations in temperature are less dangerous than marked reduction of the temperature. The favorite localities for the taking of the temperature are in the mouth under the tongue and in the axilla. Axillary temperature is likely to be a degree or so lower than that taken under the tongue. It is best to take the temperature of infants and delirious patients per rectum. This is safer and more reliable, since children will not hold still.

## TAPE-WORMS.

Tape-worms are found as an affection of meat eaters. Infection ensues in the following way: The eggs of the worm are first ingested by some animal called a host, where the embryo worm is hatched and passes into the different tissues of the body; in this condition it remains undeveloped and forms what is known as measles in the meat. There is a tape-worm from the beef, the hog and from fishes, any of which may develop in man, and though slightly different owing to the source from which the worm comes the treatment is the same for any of the several varieties.

SYMPTOMS.—The symptoms of tape-worm are not to be relied upon as proof for or against the presence of the worm. There may be no symptoms at all, or there may be colic, or a varied appetite. Itching of the nose may be present, and occasionally there is vertigo. The only sure symptom is the finding of segments of the worm in the stool.

TREATMENT.—Either of the following methods are easy as well as reliable:

℞. Hulled pumpkin seeds, three teaspoonfuls. Bruise the seeds well and cover with water and let stand for twelve hours. Take at one dose, and in three hours take a prompt acting purge, such as a large dose of Castor oil.

Or the following treatment may be employed:

℞. Oleoresin male fern, one teaspoonful. Give at one dose, or give in one-fourth teaspoonful doses, fifteen minutes apart. Four hours later give a prompt acting purge as above stated.

The day before taking the treatment the patient should take a mild purge and eat only liquid diet.

When the head of the worm is removed the worm is removed. If the head is not expelled the worm will continue to grow and will appear in the stools in segments.

All excreta of one suffering from tape-worm should be burned, as some animal used for food may be infected. All meats should be thoroughly cooked before being eaten, and measly meat should be rejected.

## TUBERCULOSIS OR CONSUMPTION.

Consumption is due to the tubercle bacillus, and is an infectious disease. Those having the disease should not expectorate where the sputa afterwards may become dry and powdered and carried in the air to the lungs of others.

The germ of consumption may invade any part of the body. When attacking the lungs

tubercle bacillus sets up what is commonly called consumption. If the brain is attacked there is acute or chronic meningitis. If the intestinal cavity, chronic peritonitis, and if the bones be invaded the result may be curvature of the spine, hip-joint disease or swelling of the joints and bones elsewhere. The glands may be involved, as is shown by what is usually called scrofula.

TREATMENT.—The locality attacked will be subject to symptoms that will require treatment as occasion demands.

There is no known cure for the tubercle bacillus. Good nourishing food, plenty of air and sunshine are to be strongly advised. We can only assist nature by giving her all the good food and fresh air she can use. In the system nature tends to destroy the germs and prevent their dissemination by throwing out inflammatory circles or capsules around the bacilli, to entomb the germs in the capsule thus formed.

Tonics are of much value in causing better digestion. The fat producing foods are of especial value to give the circulation plenty of material to use up in the resistance that must be made. Any undue strain should not be put on the system, as she has enough already. Maternity is especially contra-indicated to those who are tubercular, the mother being much endangered by pregnancy, since the disease is poorly resisted during pregnancy.

## URINE.

Healthy urine is of an amber or straw color. In health the quantity passed in twenty-four hours should be from 2½ to 3 pints. Food and drink and the amount of perspiration modify the output of urine. If more water is passed the color is usually lighter, if less, darker. In fevers the urine is usually scant and high colored. In nervous disorders it often is profuse and very light colored. Smoky, colored urine is found where there is blood present from the kidneys or bladder. In pregnancy the urine is often quite red and leaves a brick-red sediment on the sides and bottom of the urinal. Normal urine has some froth that rapidly leaves it, but if the froth remains for a long time some kidney or liver disease may be suspected. Cloudy or turbid urine is met with in inflammation and blood poison.

## WHOOPING-COUGH.

Whooping-cough is an infectious disease, so named from the peculiar long drawn whoop following a paroxysm of coughing. The disease is one of the respiratory organs, and in

many respects resembles a cold in the head and chest. Children are more prone to the disease than adults, but any one may acquire the disease. One attack prevents or renders the individual immune to the disease in after years.

Whooping-cough begins as an ordinary cold in the head with slight fever, sneezing, running at the nose and cough. In the course of ten days or two weeks the cough, which has resisted all treatment, becomes paroxysmal, or excited coughing spells develop. During the coughing spell the face becomes blue, the eyes injected with blood, and the veins of the neck and face are seen to become engorged. Vomiting is very apt to result from the cough, and the child may become poor from inability to keep food on the stomach. Nose-bleed is apt to occur as a result of the engorgement of the veins of the head from a paroxysm of coughing. The small arteries or veins in the white of the eye at times rupture, and the white of the eye may be blood red, of one or both eyes. When the paroxysm of coughing is over there always occurs a long drawn inspiration accompanied by whooping or crowing sound that when once heard will not be forgotten. The stage where paroxysms exist may last from three to four weeks, and the number of paroxysms of coughing may reach thirty or forty in a single day.

After three or four weeks of the cough and whoop the paroxysms become less frequent and finally cease. In some cases the disease only lasts a few weeks, and in others it may be extended over a period of two or three months.

Complications affecting the lungs, hæmorrhages in the eye or ear, convulsions and chronic cough may follow.

TREATMENT.—There is little use to give the expectorant cough medicines for whooping-cough, for the disease will run a certain course do what you will. It is of far greater importance to keep up the strength of the patient by careful and systematic feeding. If a child vomits after a paroxysm of coughing immediately feed the child no matter how often the emptying of the stomach may make feeding necessary. There will be times between the paroxysms that will be of sufficient length for some of the food to be digested and pass from the stomach into the intestines. Milk or brandy and milk are well borne, and also gruels or beef tea as well as the liquid foods. Eggs are also a very good food, and may be given beaten up with the milk; eggs are preferable if given raw. Sometimes a hot cloth applied to the chest will relieve the paroxysms of coughing at night. A child suffering from whooping-cough should not be left alone, as choking may occur during a

coughing spell. When the child does cough it is best to take it up and hold the body in any position that will assist the expelling of the mucus. Bend the body slightly forward that the assistance that gravity gives may help to remove the mucus, which is very tenacious. It is often a very good practice to remove with the finger, covered by a towel, some of the mucus from the mouth.

The room should be kept well ventilated. At night the steam lamp used in croup may be of value, or Cresoline may be used as directed on the lamp.

The inhalation of a drop of Amyl nitrite, from a pledget of cotton, may be tried to relieve the paroxysm.

Good food and plenty of pure air are the best remedies.

## PIN WORMS OR SEAT WORMS.

This small worm inhabits the large intestine and in appearance resembles small bits of white thread.

SYMPTOMS.—The most marked symptom is itching. The child is ever boring at the nose with the finger. Itching of the anus is a very common and persistent symptom, and is worse in the evening after retiring. Nervous symptoms are common. Reflex irritation may

cause bed wetting. The worms may migrate from the anus to the genital tract of girls and there set up irritation. Children who have worms often are very fond of candy and have dark rings under the eyes and around the mouth.

TREATMENT.—Cleanliness is necessary, for the child usually reinfects itself by carrying the eggs, after scratching, on the finger nails to the mouth in eating. The itching at night can usually be relieved by applying a little vaseline to the perineum and anus. The lower bowel may be washed out daily with an enema of salt water, 1 drachm to the pint. If salt water cannot be borne then give an ounce of olive oil and follow in a few minutes by an enema of plain water. If the hands be kept clean and the worms be daily washed from the lower bowel few cases will last more than a week or ten days. If the worms are hard to dislodge, then one-sixth grain of Santonin may be given three times a day in addition to the local treatment. These measures should cure unless the conditions are very unusual. If the child is dizzy, and there is gastric irritation, and an appearance of things being yellow, the Santonin should be discontinued lest too much be given.

## WOUNDS.

By the word wound we understand some injury from without, causing a separating of the structures to a more or less extent.

Wounds may be incised, punctured or penetrating, as from nails, gunshot and knife thrusts. The surface may be broken by bruising or cutting. The idea of a wound is that the structures have been severed, requiring repair or healing.

Wounds may be clean or aseptic, or poisoned by germs that delay healing and cause suppuration or sepsis.

TREATMENT.—Wherever the injury has occurred there is required rest and repair of the part. As there is always great danger of some infectious germs being carried into a wound the precaution of rendering a wound free from such poisonous germs becomes a routine duty. Infected wounds are cleansed by removing all dirt and lifeless tissue, and then by thoroughly bathing the wound surface in some antiseptic solution, which will kill all the germs that may be present. The Bichloride of Mercury in the strength of $^{1}/_{1000}$ is usually employed for this purpose. After thorough cleansing and disinfecting a wound the parts should be coapted or brought together by stitches or adhesive plaster. A

stimulating dusting powder should be dusted over the wound and an antiseptic dressing applied. Iodoform and Boracic Acid powders, in equal parts, make a good dusting powder. Wounds should be cleansed if there are infected areas that suppurate during healing. If pus forms disinfection is again necessary.

Punctured wounds require opening by free incision and thorough cleansing with an antiseptic solution. Free bleeding is also to be encouraged. Poison carried into the tissue by nails or thrusts must be removed and the wound made free of all poison.

## ANÆSTHETICS AND ANÆSTHESIA.

### ETHER.

Ether is produced by the action of Sulphuric Acid on Alcohol. The properties of ether are a clear, colorless liquid of a characteristic odor and a sweetish taste. Ether readily combines with Alcohol and all of the fixed oils, is highly inflammable and its vapor is highly explosive when ignited by a light or fire. Evaporation is very rapid in the open air and the surface on which it evaporates is markedly chilled, and even freezing can be produced by its evaporation. Ether should be used at a remote distance from any lamp,

candle or fire. When kept too long there is a partial decomposition of the drug, which renders it more irritating and less desirable for internal use. The chief use of Ether is as an anæsthetic. When introduced into the general system it stimulates the heart and circulation as long as it is given. When fatal results occur from Ether it is usually due to paralysis of the respiratory centers, and the heart is found beating after breathing has ceased. There are some subjects in which there is loss of sensation, but consciousness is not destroyed. Those who habitually use Alcohol are often very hard to etherize. Short, fleshy people are often poor breathers when taking Ether. The effect of Ether is shown first on the mind, then on the nerves of sensation and finally on the nerves of motion. Ether is the safest anæsthetic for general use and was introduced as an anæsthetic of marked value for surgical work in the year 1846.

### CHLOROFORM.

Chloroform was discovered about the year 1831, but was not successfully introduced as an anæsthetic for surgical purposes until the year 1847, since which time it has ranked as one of the two anæsthetics of surgery. Chloroform is far more dangerous than Ether and should be chosen after Ether has been found to be contraindicated. Chloroform is a clear,

colorless liquid, having a characteristic odor and sweetish, burning taste. Soluble in Alcohol, Ether and all fixed oils. Chloroform is less inflammable than Ether, less irritant to the mucous membranes when inhaled and attended by fewer unpleasant symptoms than Ether, but on the whole it is a much more dangerous drug. Ether stimulates, while Chloroform depresses the heart and lungs. When administered to produce anæsthesia by inhalation Chloroform rapidly produces unconsciousness, insensibility and relaxation of the muscles. The heart is quickened, but lessened in force and volume. Insensibility is produced by Chloroform in a few minutes, and recovery is attended with little or no nausea or vomiting, but fatal results have been so much more common from its use than from Ether that preference should be given to the Ether.

PREPARATION OF THE PATIENT FOR ANÆSTHESIA.

Solid food should be withheld for one meal, or from four to six hours before the operation, and liquid food for at least two hours before anæsthesia. The bowels should be moved naturally or by enemata shortly before the time for operation. False teeth or any foreign body in the mouth must be removed lest during the anæsthesia they fall into the throat and endanger the patient from chok-

ing (always look to this before beginning to give the anæsthetic). Loosen the clothes of the chest and abdomen and have the patient lie down before taking Ether.

### THE EXAMINATION OF THE PATIENT BEFORE ANÆSTHESIA.

Find out if the patient is subject to fainting spells, epileptic fits, chronic heart trouble, acute or chronic lung trouble, kidney disease, and if the patient is at the time under the influence of any drug, and if so, what drug; also, if an habitual user of Alcoholic drinks.

### INDICATIONS FOR ETHER.

Safety demands that Ether should be given in all cases where it is not contraindicated.

### CONTRAINDICATIONS TO THE GIVING OF ETHER.

Since Ether is irritant to the mucous membranes it follows that it should not be given where there is marked throat or lung trouble, such as inflammation or narrowing of the throat, chronic inflammatory affections of the lungs, such as bronchitis, asthma and consumption or tuberculosis; also, in the acute affections of the lungs whatever the cause may be. 2. Ether should not be given to patients suffering with either acute or chronic renal or kidney diseases. 3. In operations about the head Ether is often contraindicated,

especially so if the cautery is to be used, or if the operation be on the nose or throat. 4. In chronic alcoholism. 5. In childbed convulsions (puerperal eclampsia), where an immediate effect is required. 6. In the very young and the very old.

### HOW TO ADMINISTER ETHER.

First. Try to quiet all fears of the patient and then give the patient your whole and undivided attention from the time the anæsthesia is begun until the operation is over and the cone removed.

Second. The anæsthetic should be given slowly at the beginning and mixed with plenty of air. This is safer and more pleasant to the patient, less irritant to the mucous membrane of the air passages and materially lessens the struggling of the patient.

*To administer* the Ether the patient should lie on the back; the cone is next placed over the nose and held with the thumb and forefinger of the left hand. The thumb also resting firmly on the bridge of the nose, the little and ring finger press from behind the angle of the jaw forward and upward. This is necessary, and should not cease from the beginning to the end of the etherization lest the tongue drop back into the throat and materially obstruct the breathing. The Ether should then be dropped slowly on the cone and the

patient told to take long, deep breaths, to blow the Ether away, or to count up to 40 or 50. During the early stage of anæsthesia there is liable to be some struggling and there should be assistants to hold the limbs. If the Ether is given too rapidly there will likely be some spitting and trouble with mucus in the throat. As the operative stage is reached the breathing is deeper, the face flushed and moist from perspiration. The yielding of the jaw, so that it may have the lower teeth hooked over the upper, which lessens the strain on the ring and the little finger, and the absence of the reflex of the conjunctiva or of the eye, are indications that the operative stage is near at hand. As deep narcosis approaches there is often shallow breathing, followed by long drawn inspirations, and the patient may be a little blue. Such breathing is not the best, and the cone should be removed until the breathing is regular, as the giving of much Ether at this time is very dangerous, and if any of the anæsthetic be given the amount should be very small until the breathing is regular again, then continue the Ether and keep the patient just in the operative stage.

When the stage for operation is reached there will be relaxation of the muscles, absence of the conjunctival reflex, and the eyes will be steady and the pupil small. After the

patient is well under Ether the amount of the anæsthetic needed to continue the narcosis is small, and it should be given slowly and with plenty of fresh air. A large pupil is either a sign of returning consciousness or of danger, and of itself will not tell if more or less Ether is needed. The rolling of an eye with a dilated pupil slowly from side to side precedes the coming consciousness a short time, and the anæsthetist may know by this that he should give more Ether, or if the pupil is large and the eye fixed or immovable the patient is already too far under and the Ether should be withdrawn. The anæsthetizer should watch the breathing. If long and including the abdominal walls it is good; if short and jerky, and only of the chest, danger and great danger is near, and the Ether must be stopped at once. If there is stertorous or noisy breathing the tongue has slipped back and the jaw must be brought forward at once. The pulse must be watched, and to do this the middle finger can rest on the artery that crosses the lower jaw between the angle and the chin; also, the radial pulse should be watched. A dark color of the lips and the fingernail indicate that the patient is not getting enough air, and the cone should be removed. When the patient has received too much Ether the eyes are fixed, the pupils dilated and do not contract when exposed to

light; the breathing short and jerky, the lips and fingernails are blue and breathing may cease from paralysis of the respiratory nerve centers. Remember, the patient deserves your undivided attention. Give the Ether slowly at first, and very cautiously, just as the patient goes into the operative stage. Keep the lower jaw forward. Watch carefully the pulse, the eye, the breathing and the color of the lips and fingernails.

### HOW TO MEET EMERGENCIES.

Have with you a short piece of wood ½ by 1 by 6 inches to use as a pry in spasmodic closing of the mouth.

A pair of forceps to grasp the tongue with in case of accident. Towels to wipe out the mouth with in case of choking, and have ready Brandy and Strychnine if needed to be used as heart tonics. In asphyxia of choking from swallowing the tongue, bring the jaw well forward, and if necessary draw the tongue out of the mouth with a pair of forceps. Asphyxia from too much ether should be met at once with artificial repsiration, as follows: Lower the head, hold the jaw well forward and the mouth open, let two assistants take either arm at the elbow and carry them up until they meet over the head, then down again until they touch the anterior surface of the chest, press simultaneously and

firmly on the chest, and then repeat the motion. The movements of the arms for artificial respiration should be about sixteen or eighteen per minute, not more. Do not stop efforts at resuscitation too soon. Dash cold or hot water on abdomen and chest, and rub the extremities toward the heart. Ice slipped into the rectum or the rectal specula will by reflex action often promptly restore breathing. As soon as swallowing returns give alcoholic stimulants. Where there is choking from foreign bodies in the throat, or from mucus, turn the patient on his face and remove substance with the finger and towel. If the patient vomits turn him on his side, face down, until the mouth and throat are empty. Remember last of all that any drug capable of producing unconsciousness is not devoid of danger, and that cases are lost occasionally by the most skilled. Chloroform has more than twice the mortality of ether. Ether is said to be the direct cause of death of one case in 26,000; but those who have not handled this drug should not use these figures as a proof that they will not have this one fatal case. If ether is given at night place the light well above the patient. Ether vapor is heavy and falls to the floor. If explosion occur cover the patient's face and set the ether can aside, do not throw it lest it burn and the trouble be made worse.

### THE ADMINISTRATION OF CHLOROFORM.

The preparation and also the examination of the patient and the restrictions of food are the same as for ether.

### INDICATIONS FOR THE USE OF CHLOROFORM.

Chloroform is indicated where ether cannot be used and anæsthesia is necessary. 1. In acute and chronic affections of the throat and lungs. 2. In acute and chronic renal or kidney diseases. 3. In chronic alcoholism. 4. In night operations where ether cannot be used on account of the light or fire. 5. In operations about the nose and throat. 6. In convulsions of childbed fever (eclampsia). 7. In nervous and mental diseases where the exciting effects of ether cannot be borne without danger to the patient.

### CONTRA-INDICATIONS FOR THE USE OF CHLOROFORM.

1. Chloroform is contra-indicated wherever ether can be used. 2. In faintness and weakness from loss of blood (shock). 3. Epilepsy. 4. Where there is a tendency to fainting. 5. In the various diseases of the heart, and where Chloral hydrate has been given shortly before anæsthesia.

To administer chloroform the patient should be in the recumbent position. The clothing

loosened, false teeth removed, and the fears of the patient quieted as much as possible. The lower jaw should receive the same care as in ether. The cone should not be used, but instead a single thickness of some light woolen fabric stretched over a frame of suitable shape and size. It will be remembered that ether is a stimulant to the heart and nerves of circulation; that it is more irritant than chloroform to the mucous membrane, and that it kills by paralysis of the respiratory centers. In ether poisoning breathing ceases long before the heart refuses to act, thus giving more time and chance for resuscitation than in chloroform. Chloroform depresses the heart and nerves, and when the heart stops the chances of resuscitation are few. Hold the inhaler or mask for chloroform two or three inches from the nose, and begin by dropping slowly the chloroform on the mask. As soon as the giving of chloroform has begun never remove your eye or attention to anything else than the patient, until the patient has recovered beyond the point of danger. Never be in a hurry in giving chloroform. Usually there is little struggling, and the patient passed rapidly into the second or operative stage of anæsthesia. Keep the jaw well forward. Sometimes in the first stage of chloroform there is restlessness, short breathing and anxiety of the patient; if this occurs

remove the mask and let the patient quiet a little, to push chloroform at this stage is dangerous. When the patient is about to pass into the operative stage be very careful not to give a poisonous or overdose of the drug, for with the deep breaths common at this time too much chloroform can easily be given. Remember there is no safety but in little chloroform and plenty of air. Watch the eye as in ether, and try to keep the patient as near the stage of coming out as can be, and yet be fully under. It is dangerous to operate when the patient is not fully under, but strive to keep him just in the operative stage of anæsthesia. In the operative stage of chloroform the pupil is more contracted than in ether. A *dilated pupil* and *fixed eye* with *short breathing* indicates *danger*, and the drug must be stopped at once. Do not let the breathing become noisy, keep the jaw well front. Watch the pulse, the breathing, the jaw and the color of the lips and finger-tips. If the heart is quick and hard there may be too little air, raise the mask higher. For choking or vomiting proceed as in ether. If the pupils become dilated, the eye fixed, the respiration shallow and the lips blue, stop all chloroform, lower the head of the patient, apply friction of the limbs towards the heart, and give hypodermic injections of heart tonics and of brandy.

After taking an anæsthetic some one should

watch the patient until he is well out from under the influence of the drug. There may be vomiting, and some one be needed for this as well as to see that from restlessness an operated part be not injured. After chloroform the tendency to vomit is not so great as after the ether; the patient usually passes into a long sleep to awake conscious. The dangers of moving are injury to the operated part, or, if allowed to rise, added strain may be put onto the heart that needs the time following the operation to regain its strength.

### LOCAL ANÆSTHESIA.

There are different agents used to produce local anæsthesia, but for ordinary use we will consider only the one drug, Cocaine hydrochlorate. Cocaine hydrochlorate can be secured in various forms for surgical use, but is best in the one-fourth grain tablet. The dose is from one-fourth to one grain. The drug is used on mucous surfaces by being dropped on the place or line of incision about three minutes before the time of using the knife. Small operations may be done under the influence of cocaine, by first injecting with the hypodermic needle a little of a one per cent. solution along the line of incision. In small amputations and incisions the time to cut is about five minutes after the injection of the drug. There will be no pain felt for about ten or

fifteen minutes after cocaine has been injected. Where cocaine is used on fingers or toes, the member should have a stout ligature or string tied around it to retard the flow of blood from the part, as it may, if too rapidly absorbed, produce alarming nervous symptoms.

If the patient becomes restless, talkative and pale, there has been too much drug given, or it has been absorbed too quickly.

If such symptoms occur have the patient lie down and give brandy or other heart tonics and allow the use of smelling salts or ammonia.

Overdoses of cocaine may produce pallor, restlessness, tremor, syncope, weak heart action, delirium and convulsive fixation of the chest and organs of respiration.

In using cocaine use the drug just where you wish to cut. Use as little as will thoroughly deaden the pain. Try to retain the drug where it is needed and avoid large veins or vascular areas when injecting it.

For small lancings and minor operations cocaine is preferable to using either of the stronger anæsthetics. Use the drug with care and you will find it very serviceable. If the patient begins to talk freely while you are using the drug, look at his face, and if he is a bit pale, give him at once some brandy and have him lie down. Fatal results may occur but are not common. Be careful of the use of

cocaine at all times, and especially on children and the very old.

### ACONITUM NAPELLUS.

Aconite is usually given in the tincture. In moderate doses it slows the pulse and respiration or breathing, and lowers the temperature.

USE.—In febrile affections, where there is a rapid pulse, rapid breathing and mental anxiety. In the early stages of a cold where there is fever. Early in quinsy. Sore throat and the fevers of children. The *dose* should be 1 drop in water every hour until the fever and pulse are lessened. For children the dose should be reduced by adding water according to the age of the child.

### HOMŒOPATHIC PREPARATION AND INDICATIONS.

DOSE.—One drop of the tincture every hour for 4 or 5 doses, or 1 drop of the IX dilution every hour until symptoms abate.

Symptoms for which Aconite is indicated:

Fear and anxiety of mind, fear of death, congestion of the head and derness of the face, throbbing headache, roaring in the ears, nose bleed, dry mouth and continual thirst, bitter taste in the mouth, watery, slimy stools, small amount of urine that is high colored and its passage is associated with burning in the bladder.

*Aconite is good for* neuralgia of the head, iety. For colicky, shooting pains in the abdomen, For colicky, shooting pains in the abdomen, with watery, slimy stools. For fevers where there is a hard, quick pulse, rapid breathing, mental anxiety and unsatisfied thirst. For suppression of the menses from fear or anxiety. For pain in the heart that extends down the left arm, with rapid pulse after exposure to cold.

For neuralgia 30 drops of the Tr. Aconite in an ounce of water makes a very good lotion to bathe the face with.

For toothache 1 drop of Tr. Aconite will afford rapid relief, applied on a little cotton, and keep the saliva from the aching tooth by a pledget of cotton between the tooth and the cheek. Early in fevers there is no drug to surpass Aconite. From 5 to 10 drops of the tincture may be placed in a half glass of water and a teaspoonful be given hourly until the fever is reduced and the pulse slowed. When the fever and pulse have been reduced it is best to stop the use of the drug. At all times avoid large doses. It is not advised to go beyond 5 to 10 drops in the course of any single day. For children make the dose less. The tablets are very convenient to give. The dilutions are better for the chronic conditions calling for Aconite. Never

let the cup of medicine remain where some one may drink it by mistake.

### APIS MELLIFICA (HOMŒOPATHIC).

Dose, 3x to 6x, 1 tablet every two hours.

SYMPTOMS CALLING FOR APIS.—Swelling, with burning and tingling in any part of the body. The mind is sluggish. Pain in the head relieved by pressure. The patient is restless and turns from side to side in bed, and at times suddenly cries out and screams. Puffiness of the eyes and dread of light, swollen tongue and swollen tonsils, with difficult swallowing and obstructed breathing; soreness of the abdomen, greenish, watery stool, worse in the morning and an inability to retain the movements; the bowel as it were remains open, dark, scant urine; swelling of the limbs, with a waxy, watery appearance; hive-like eruption, with sticking, itching and burning pain.

### ASAFŒTIDA.

Asafœtida is a gum from a Persian plant.

Dose, 1 to 3 grains in a pill, two or three times a day.

Asafœtida is a valuable remedy for disturbances of the nervous system. Hysteria and nervous excitement of any kind.

It is a prime remedy for indigestion, with much distension and a feeling of a ball rising

in the throat. For windy rumbling of the bowels, with the passage of much gas.

For nervous indigestion and the disturbed digestion of the aged, associated with distension, wind and colic, and the belching of greasy, rancid tasting food.

Asafœtida, 3 grains; Powdered Nux vomica, ¼ grain, in pill, 1 pill after meals, is a good remedy for nervous indigestion.

### ASAFŒTIDA (HOMŒOPATHIC).

Dose, 1x to 3x, 2 or 3 tablets, three times a day.

Asafœtida is indicated for hysterical symptoms, nervous excitement, a sensation of a ball rising in the throat, belching of rancid, greasy tasting food, a windy condition of the bowels; for an all-gone empty feeling of the stomach, with gnawing and burning and a rancid, greasy taste in the mouth.

### ARSENICUM ALBUM.

Arsenic is a drug much used by all schools of medicine.

In regular medicine Arsenic is used for nervous affections, such as St. Vitus' dance, neuralgia and for diabetes, consumption, rheumatism, malaria and diseases where there is a chronic, warty thickening of the skin. Arsenic is usually given in Fowler's solution. The dose is from 1 to 5 drops (given in water) three times a day.

Begin with a small dose and increase the dose gradually from day to day. Puffy swelling of the eyes in the morning and looseness of the bowels, with colic, are signs that enough of the drug has been given and its administration should cease or the dose be reduced to about two-thirds of what was being given when the puffiness of the eyes and diarrhœa appeared.

Should poisoning occur from the accidental swallowing of an overdose of Arsenic give an emetic. When the stomach is empty or before, if the emetic acts at all slow, administer Ferric Hydrate and Magnesia in tablespoonful doses every fifteen minutes. Arsenic is very poisonous, and its administration should be according to directions.

### ARSENICUM ALBUM (HOMŒOPATHIC).

Dose, 3x to 6x, 1 tablet given after meals or in water.

SYMPTOMS CALLING FOR ARSENIC.—In acute cases use the 3x tablet, and for chronic cases use the 5x or 6x tablet.

Arsenic is indicated where there is great mental anxiety, restlessness and the patient cannot bear to be alone; starting and jerking of limbs when asleep, frontal headache, worse from heat and relieved by cold compresses; watery corroding discharge from the nose, the gums are swollen and bleed easily, the face

is pale and drawn and neuralgic pains. Food is not tasted, gnawing and burning in the abdomen, with a desire for water all the time; drinks little and often; there is cutting pain in the bowels, with dark, watery stools, that are followed by burning in the rectum and anus.

Prostration is a marked symptom with the diarrhœa. Arsenic is good in kidney disease, associated with dropsy and puffiness of the face and limbs. Watery appearance of the skin, and, though the body is over-charged with water, there is a continual thirst. Dry, hacking cough and dryness of the chest before midnight. The skin is dry and harsh, with burning itching and biting pains. There may be eruptions that crust easily and burn and itch around the crusts. Ulcers that burn and have a watery, offensive discharge. Arsenic is good for the later stages of fevers, where there is blueness of the lips, dryness of the skin, dryness of mouth and cracking of lips, with thirst during the fever for oft repeated drinks, and diarrhœa of dark, offensive stools.

The Arsenic patient is worse after midnight, worse from cold or cold drinks, relieved by warmth and warm drinks and feels worse from lying still.

### ALUM.

Alum may be in large, colorless crystals or in a white powder. Alum is seldom used for internal medication. One to 2 teaspoonfuls will usually cause vomiting. Five to 10 grain doses may be used to check diarrhœa, but there are so many bad results from the internal use of Alum that it is seldom given. Irritation of the stomach and disturbed digestion is very apt to follow the internal use of the drug.

Externally burnt Alum is often used as a powder for unhealthy wounds, ulcers, etc., etc. Alum cleanses the wound, stimulates healing and tends to remove exuberant granulation or proud flesh.

Powdered Alum may be blown into the nose to stop nose bleed. A strong solution of 1 drachm or 1 teaspoonful to a pint of water may be drawn from the hand into the nose to stop nose bleed. The same solution may be used to bathe bleeding surfaces with or dressings may be applied to bleeding wounds that have been saturated in the Alum solution.

### ANTIMONIUM CRUDUM (HOMŒOPATHIC).

Dose, 3x to 6x, 1 tablet every two hours.

SYMPTOMS CALLING FOR THE DRUG.—Morose, thinking on the dark side of things. Is peev-

ish and sentimental. Does not want to be touched or looked at. Dizziness and headache, worse after eating. The abdomen feels distended. Vomiting that is difficult to stop. An urgent call to evacuate the bowels, and the effort is attended with the escape of much gas and finally a small movement, followed by sticking, burning, deep-seated pain in the rectum.

### ARNICA MONTANA (HOMŒOPATHIC).

Dose, θ to 3x, 1 to 5 tablets every two or three hours.

SYMPTOMS CALLING FOR ARNICA.—Sore, bruised sensation in any part of the body. Stitching pain in the head following bumps or blows to the head. Offensive taste in the mouth, with nausea after eating. Fermental diarrhœa, with slimy blood-streaked movements that are followed with much burning and tenesmus or griping.

Soreness of the abdomen after labor. Soreness of the chest from coughing. Arnica is indicated in whooping-cough when children cry before coughing from the anticipation of pain. Soreness of the limbs, with fear of being touched. The Arnica patient complains that the bed is too hard and he cannot find a soft place. Arnica tincture diluted with twice its volume of water makes a good lotion for bruises. Arnica should not be used where

the skin has been broken, but in its stead Hamamelis is to be preferred. For blood-spitting give 5 tablets of the tincture every hour.

### ANTISEPTICS.

Antiseptics, as the name would imply, are drugs opposed to septic or putrefactive conditions. Antiseptics are used locally to cleanse infected areas or to prevent infection in newly injured structures. Internally these drugs are usually violent poisons, and for this reason should be well marked, labeled and guarded to prevent accidental administration and serious results.

### BICHLORIDE OF MERCURY OR CORROSIVE SUBLIMATE.

There is no other antiseptic so generally used as Corrosive Sublimate. It is a violent poison when taken internally. Should poisoning occur from the accidental swallowing of Corrosive Sublimate the first thing to be done is to empty the stomach by a prompt emetic. Then give egg or egg albumen freely and oft repeated. The egg albumen combines with the free or unabsorbed poison and forms a non-poisonous compound.

For the disinfection of surface wounds the Bichloride of Mercury may be used in the strength of $^1/_{1000}$. This is a good strength

for the disinfection of the hands prior to the handling of wounds or the performing of operations. For the continued use on wounds or for wet dressings the drug is best used in the strength of $^1/_{2000}$, as, if applied too strong, there is danger of vesication or blistering of the surface and perhaps absorption of too much of the drug. If vesication should occur discontinue the use of the Corrosive Sublimate, and dust the vesicated part with some powder as Boracic Acid. The tablets are the best form in which to get the Bichloride of Mercury or Corrosive Sublimate for external use.

N. B.—Always mark as poison and keep where no mistake can arise.

### CARBOLIC ACID.

Carbolic Acid is very poisonous in large doses. As much as 2 grains may be taken internally if diluted in water and cause no alarming symptoms.

Poisoning may be produced by accidental swallowing of a watery solution or by the application of the acid in solution over extended wound surfaces.

The mouth and tongue have a burnt appearance where a strong solution has been injected, and the breath has the characteristic odor of the drug. Where absorption from the surface of the body has produced poisoning the

symptoms are dizziness, headache, weakness of the body and dark, cloudy urine.

If accidental poisoning occur wash out the stomach with the stomach tube, using as a wash a solution of Epsom Salts in water, ½ ounce of Epsom Salts to the pint of water. Alcoholic drinks should also be given in the form of wine, brandy or whisky, for the alcohol in the drinks stops the caustic action of the acid. It is not necessary to cause intoxication. Oil is a very good thing to be given as soon as possible after the injection of the acid, as it dissolves the acid and prevents the deep burning of the drug. Epsom Salts in solution acts on Carbolic Acid and forms with it a non-poisonous substance. Egg albumen is also of service if given at once after the ingestion of the drug that the acid may act on the egg and prevent deep burning of the tissues. If the symptoms of chronic poisoning develop from the external use of Carbolic Acid stop its use in lotion or salve and the poisonous symptoms will disappear.

For the hands and to cleanse offensive sores and ulcers Carbolic Acid in the strength of $^1/_{20}$ or $^1/_{40}$ is an excellent wash.

Externally Carbolic Acid is used as a caustic in strong solution and as a disinfectant in the weaker solutions. Carbolic Acid combines with water in all strengths. The 1 per cent. solution is good for ulcers,

itch, tetter and itching areas in any part of the body, and for offensive arm pits and offensive feet.

For offensive sore throat use 8 drops to the ounce of water as a gargle. For itching surfaces 16 drops to the ounce of lard or vaseline, and apply as occasion demands. Also, as a soothing wash the following may be used:

℞. Carbolic Acid, 2 drachms. Alcohol. Glycerine aa, 1 ounce. Water, 1 pint. Use as often as occasion requires as a soothing wash.

If a boil or carbuncle is to be lanced paint the line of incision with a strong solution and in a few moments the incision can be made without much pain being felt.

For toothache apply a drop of the strong solution on a small pledget of cotton and cover with some more cotton, or keep the saliva from the tooth by a piece of cotton against the cheek. The Carbolic Acid if allowed to act is a very good remedy for toothache.

The cavities of carbuncles and deep, offensive ulcers are much benefited by being frequently cauterized to the very bottom with a strong solution.

### BELLADONNA.

Dose.—Tincture of Belladonna, 3 to 10 drops. Fluid Extract Belladonna, 1 to 2

drops. Atropine Sulphate, $^1/_{500}$ to $^1/_{100}$ grain. (N. B.—Part of a grain.)

Internally, Belladonna in full doses produces dryness of the throat, dilated pupils and increased frequency of the pulse; it produces mental excitement and lessens all the secretions from mucous surfaces.

Belladonna is used in convulsive seizures. Spasms of the throat, as in croup and whooping cough. Incontinence of urine in children. As an adjunct to other drugs in constipation. As a local application in chilblains. Atropine in $^1/_{150}$ part of a grain is used for the night-sweats of consumption, given at bed-time.

In child-bed conditions where the mother cannot nurse the child $^1/_{200}$ part of a grain twice a day will assist in drying up the milk. A Belladonna plaster is sometimes applied to the breast instead of giving Atropine.

In salivation from overdoses of Mercury, $^1/_{200}$ part of a grain of Atropine Sulphate is beneficial to stop the excessive flow of saliva. Give two or three times a day.

Never give Belladonna or Atropine Sulphate longer than to get the dilated pupil and dry throat. Do not give Belladonna or Atropine to light complected persons, as they are very apt to be susceptible to the drug, and may break out in a red rash from its effects.

Handle Belladonna and Atropine Sulphate with care, as they are strong drugs, and some

persons are quite susceptible to even small doses.

BELLADONNA (HOMŒOPATHIC).

DOSE.—IX to 6x, 1 to 3 tablets every two to six hours.

INDICATIONS CALLING FOR BELLADONNA.—Flushed, bright red cheeks, injected eyes, throbbing headache, dilated pupils, squinting of the eyes, grinding of the teeth. Jumps from sleep and cries out and tries to escape. Delirium, tears at the clothing; clutches in the air and starts as if falling. May lapse into a stupor and awake with a scream and intense fear. Bores the head into the pillow. Hot skin and throbbing pulse. (Threatened convulsions of childhood should lead you to think of Belladonna.) In the ears there is shooting pain that may pass from ear to ear. Dry throat. Tongue red on edges and white in centre, with strawberry-like appearance of the tongue caused by the papillæ of the tongue showing through the white coating. Bleeding of the nose, soreness of the throat, putrid taste in the mouth. Diarrhœa of green mucus with griping and bearing down. Turbid urine and frequent desire to urinate. Involuntary urination during sleep. Backache. Pain in the neck. In women the menses are too early and too profuse, with offensive discharge. When the flow is established the blood is bright red.

Belladonna pains gradually increase and then suddenly disappear, to reappear in some other part of the body. The pain is worse on the right side. Jarring the bed makes the pain worse. Pain worse by gentle pressure, but firm pressure does not annoy the patient.

Belladonna is of much service in the diseases of children and in fevers where there is a bright flushed face and delirium.

### BAPTISIA TINCTORIA (HOMŒOPATHIC).

Dose.—1x to 4x, 1 tablet every four hours.

Symptoms Calling for Baptisia.—Dark, flushed and besotted appearance of face. Confusion of ideas. Stupid, goes to sleep when talking or forgets what he is saying. Stupefying headache. Feels as if scattered about in the bed, and wants to get the parts together. Dark brown streak in the centre of the tongue. Fetid breath, offensive ulcers in the mouth. Offensive diarrhœa with colic and griping. Offensive perspiration. Chest seems full and is short of breath. Urine dark and offensive. Trembling of hands and feet.

Baptisia is a good remedy in some forms of typhoid fever, and for fevers in general where there is a low exhausted condition.

### BISMUTH SUBNITRATE.

Dose.—From 2 to 40 grains. Usual dose, 4 grains for children; 10 grains for adults.

Bismuth Subnitrate is a white powder almost tasteless, is permanent, or does not change if exposed to the air. Bismuth has an astringent and antiseptic action. Bismuth is a very valuable remedy for acidity of the stomach, catarrh of the stomach, ulcer of the stomach, and acute indigestion with vomiting.

In catarrhal diarrhœa where the bowels are empty or have been emptied by a purge, Bismuth is antiseptic and sedative to the intestinal mucous membrane.

After taking Bismuth the stool becomes dark or greenish from the decomposition of the drug in the intestines.

Locally, Bismuth and Starch in equal parts make a good healing powder for ulcers and bed-sores. One drachm of Bismuth to an ounce of vaseline makes a good healing salve.

For ulcer and catarrh of the stomach give 10 grains of Bismuth one-half hour before the meal. For diarrhœa give 10 to 15 grains of Bismuth two hours after the meal, that the Bismuth may not lay in the stomach while digestion is going on. After two hours the food passes from the stomach. If milk is the food, give the drug one hour after feeding, in order that, as the food leaves the stomach, the Bismuth will reach the intestines in a direct manner. For diarrhœa of infants give 3 or 4 grains of Bismuth, one hour after feeding.

For acidity of the stomach give any time when required. For the diarrhœa of adults give 10 grains, two hours after meals. If given with the meal the drug lies in the stomach during digestion; therefore, give some time after eating.

### BRYONIA ALBA (HOMŒOPATHIC).

DOSE.—1x to 6x, one tablet four times a day.

INDICATIONS FOR BRYONIA.—Fullness of the head, splitting headache, irritable. Wants things and when they are offered refuses them. Mouth parched and dry. Tongue coated dark brown and cracked. Great thirst for much water at a time, at long intervals. Weight in the stomach after meals. Sensation of a lump in the stomach. Stitches in the liver. Constipation, dry, dark, lumpy stool. Tenderness of the abdomen. Urine scant and red in color. Menses in women too early, too profuse, and attended with stitching pain in the abdomen and legs. Rheumatic swelling of the joints, starting on going to sleep. Dry cough worse at night when in bed. Stitch-like pain in the chest, the abdomen and in the joints. Bryonia is good in typhoid fever where the limbs are sore and motion makes all the pains worse. Severe frontal headache. Delirium where the patient wants to go home or dreams of business. Nose-bleed is also present in fevers where Bryonia is indi-

cated. The Bryonia patient is worse in the morning and worse from motion.

### BETA NAPHTOL BISMUTH OR ORPHOL.

Orphol is a light-brown powder having no odor or taste.

Orphol, ½ drachm to 1 ounce of lard or vaseline, is one of the best, quickest and least irritating ointments for the cure of the itch. One-half drachm to 1 ounce of vaseline is quite sufficient where the surface involved is large.

Apply the ointment daily for five or six days, then take a bath or wash the affected area.

### BERBERIS VULGARIS (HOMŒOPATHIC).

Dose.—2x to 6x, 1 tablet three times a day.

Indications for Berberis.—Sticking pain in the region of the liver or under the ribs of the right side of the chest. Sticking pain in the kidney, which may extend from the kidney to the bladder. Burning, cutting pain in the bladder worse on urinating and extending into the urinary passage. Red sediment in the urine. Biliary colic, liver spots. Is a good remedy for women who have pain in the right side. Liver spots (dark brown areas on the face or other parts of the body). Such women have headache, pain in the back that extends into the legs, and pain on urinating

that comes from the bladder and extends along the urinary passages.

### COLOCYNTHIS (HOMŒOPATHIC).

DOSE.—$\theta$ to 3x, 1 tablet every hour until relieved.

INDICATIONS FOR COLOCYNTH.—Violent neuralgia of the head and face, worse on the right side. Very irritable. Severe colicky pains in the abdomen, worse around the navel. Sore feeling of the bowels. Colic relieved by bending forward and by pressure. Green or bloody diarrhœa, diarrhœa after emotion or vexation. Colic and diarrhœa always associated. Ovarian colic at menstrual period relieved by pressure. Sciatica or pain extending from the hips to the thighs and feet. Cramp-like pain in any part of the body as if the part were in a vise.

### CATHARTICS.

Cathartics are drugs that will move the bowels by their action on the muscular walls of the intestines, or by causing an increased amount of fluid in the intestines, excited by the action of the drug on the intestinal mucous membrane. Some cathartics act on the large intestine and some on the small. The object desired should direct in the selection of the cathartic.

### U. S. P. CATHARTIC VEGETABLE PILLS.

The U. S. P. Veg. Cathartic Pills are a combination of drugs that act on all parts of the intestine, causing an increase in the watery secretion of the bowel, and an increase in the onward movement of the intestines. They are a very efficacious remedy for the emptying of the bowel.

DOSE.—One to two pills, and repeat in six hours if no movement has occurred.

### CASTOR OIL.

DOSE.—One teaspoonful for an infant and ½ to 1 ounce for adults.

Castor oil is a safe and prompt cathartic, moving the bowels by its irritant action on the muscular coats of the intestines. The time required to cause a movement is from four to six hours. Following the use of Castor oil there is usually a reactive quiescense of the muscular coats of the intestines and a tendency to constipation; therefore, Castor oil is to be given for the simple emptying of the bowel and not as a remedy for constipation. Where there is acute indigestion and the bowels needs emptying there is no better remedy. In summer complaint or in diarrhœa that results from improper feeding, one dose of Castor oil is very beneficial in assisting the intestines to rid themselves of their

obnoxious burden. Following Castor oil the Subnitrate of Bismuth in fairly large doses often affords prompt relief to the drain of diarrhœa.

### CROTON OIL.

DOSE.—One to 2 drops, and repeat in two hours if the bowels have not moved.

Croton oil is a very prompt cathartic acting usually within two hours, and often within one-half hour. The oil is very irritant to the stomach and bowels, and produces its prompt results by causing the muscular coats of the bowel to act energetically. Croton oil should not be given where there is inflammation or disease of the intestines, as it then may do much harm by its irritant action.

Do not give in larger doses than one to two drops. It is given best on sugar.

LOCALLY.—Croton oil will blister if painted on the skin. Applied to warts daily it will cause their disappearance.

### CASCARA SAGRADA.

DOSE.—From 10 to 60 drops.

Give after meals or at bedtime. Cascara Sagrada Aromatica is the most pleasant form to take.

Cascara causes an increased action of the muscular coats of the bowels and may thus cause some griping.

Where there is atony or inactivity of the bowel, as is often the case in elderly people, Cascara in small doses after meals or at bedtime will assist much in establishing a regular habit. The habit of moving the bowels at a regular hour in the day is of much importance, and should be acquired by all. Constipation is almost a confession of laziness, and the taking of cathartics is only a means of temporizing, and, if persisted in, makes matters worse.

### CALCAREA CARBONICA (HOMŒOPATHIC).

DOSE.—1x to 3x, 3 tablets three times a day.

INDICATIONS FOR CALCAREA CARB.—Sees objects on closing eyes, but the objects disappear on opening the eyes. Acidity of the stomach and vomiting. Great appetite early in the morning. Sour, offensive stools of undigested food. Dry cough at night. Expectoration in the day. Any wound of the skin heals poorly.

In light-complected women Calcarea carb. is good where the menses come too early, last too long and are too profuse.

Calcarea carb. is the remedy for fat, fair, flabby children who have a large head, sweat easily about the head, are stupid and sluggish of thought, have a large abdomen, are subject to sour vomiting and sour diarrhœa, have cold hands and feet, swollen and enlarged

glands. Such a child may be thin or run down in flesh, though the natural tendency is is be fat. Children with scrofulous taints, and those of consumptive parents are often much benefited by the use of this drug.

### CHAMOMILLA (HOMŒOPATHIC).

DOSE.—$\theta$ to IX, 1 tablet every two hours.

Chamomilla blossoms can be had at any drug store, and from the blossoms a very soothing tea is made for infants. Steep a teaspoonful of the blossoms in a small cup of water, strain, add sugar and give to the child as occasion may demand. There is no danger in giving Chamomile tea to cross babies, on whom it has a soothing action.

INDICATIONS FOR CHAMOMILLA.—There is great restlessness and violent temper. Cries for things and then refuses them when they are offered. Child wants to be carried from one place to another. Throbbing headache with perspiration of the head. Twitching of the eyelids. Toothache, sore throat and a bitter taste in the mouth. Vomiting of bile. Stools hot and burn, smell bad and look like chopped spinach and egg. Hoarseness and a cough that is dry even though there is rattling of mucus in the chest. Cramp-like pains of the hands and feet. Clinching of the hands, and pain in the calves of the legs. Starts during sleep with a sudden cry. Face hot and

the breath is hot, while the hands and feet are cold. Yellow appearance of the skin.

In men nocturnal emissions, pain in the back and weight in the genitals.

In women the menses are preceded by leucorrhœa, and the flow is profuse, dark and clotted, with pain in the back and legs.

### ACTEA RACEMOSA (HOMŒOPATHIC). CIMICIFUGA IS THE SAME DRUG.

DOSE.—$\theta$ to 3x, 2 tablets every three hours.

INDICATIONS FOR CIMICIFUGA OR ACTEA RACEMOSA.—Gloomy state of the mind, wishes solitude. Head feels too large and there is severe frontal headache. The top of the head feels as if it would fly off. Neuralgia of the scalp. Aching of the eyeballs. Fullness of the throat and hawking up of mucus.

In women there is a tenderness of the uterine region. The menses come too early, are dark and clotted, and there is a tenderness of the abdominal organs. The patient may weep from anxiety. There is leucorrhœa, or what is commonly termed the "whites," with a heavy sensation in the uterus. Stoppage of the flow from cold or emotional excitement. After-pains during the child-bed period. Stiffness of the neck with pain on motion. Pain in back and hips. Pain from one hip to the other through the pelvic organs.

Cimicifuga is one of the best remedies for

stoppage of the flow. Painful menstruation. Gloomy depression and headache during the flow. For delayed menstruation. For hysterical symptoms with numbness of the body and nervousness from exertion. For the many and varied nervous, mental and physical phenomena of the change of life.

### TR. CIMICIFUGA (ALLOPATHIC).

In regular medicine Cimicifuga is given for the nervous conditions of the change of life. Sudden stoppage of the flow. For absence of the flow, and where the flow comes between the proper time. Hysteria, mental unrest after confinement and St. Vitus' Dance.

DOSE.—Ten to 30 drops of the tincture three times a day.

### SULPHATE OF COPPER. BLUE VITRIOL.

Internally, the Sulphate of Copper is not much used. In case of Phosphorus poisoning, from 4 to 10 grains may be used as an emetic, also using other means to hasten vomiting. With Phosphorus the Sulphate of Copper forms a non-poisonous compound. If, when given as an emetic, the drug should not cause vomiting, then give 10 grains of Carbonate of Soda and an egg or two, and some milk to counteract the drug's action. If Phosphorus has been taken, do not rely altogether on this drug, but give Ipecac or Apomorphine in addition.

Externally, the Sulphate of Copper is a very good remedy for sore eyes and snow-blindness. One and one-half grains to 2 drachms of water, or a 1 per cent. solution, is a very good remedy for sore eyes. For gonorrhœa or purulent discharges from the genital tract much benefit is derived from the washing or irrigating of these organs with a solution of 15 to 30 grains to the pint of water.

### CAFFEINE CITRAS. CITRATE OF CAFFEINE.

Caffeine Citrate is a white, inodorous powder. The taste is acid and bitter. This is the active principle of coffee.

The dose is from 2 to 5 grains.

Used with Acetanilid it makes an excellent headache powder.

Caffeine Citras, 20 grains. Acetanilid, 30 grains. Mix, and make ten powders.

Take one for headache when occasion may require.

### CHINA (HOMŒOPATHIC).

Dose.—0 to 6x, 1 tablet every three to six hours.

Indications for China.—Discouraged, indisposed, neuralgia over the eyes and of the upper jaw. Throbbing headache, burning in the eyes. Roaring in the ears, frequent nose-bleed, dry lips and mouth, dry tongue, belching, poor

digestion, fullness after eating, constipated, difficult stools. At times diarrhœa that is painless and passed with apparent difficulty. Urine dark and scant.

In women the menses are early and dark, clotted. Menses preceded by leucorrhœa and pressure in the abdomen.

Nocturnal emissions with debility in men.

China is to be thought of in fevers where the pulse is small and rapid. Chill of the body preceded by thirst. Distress of the chest and an inclination to take a deep breath. The patient that needs China is worse every other day or at repeated periods. Has neuralgia of the forehead, upper cheek-bone and of the teeth.

China is of value where there is depression from exhaustion, or where there are excessive discharges from the body of any nature, and where there has been loss of blood following an accident.

## DOSE AND ADMINISTRATION OF DRUGS.

By a drug is meant a simple or compound substance, which, when introduced into the system is capable of producing local or constitutional symptoms peculiar to that drug.

Drugs may be either derived from the vegetable kingdom or from the mineral or earthy elements, in the natural state or as the result of chemical action.

Drugs are given in some substance that is used to carry and keep them in solution or in dilution that the size and force of the drug may be regulated and brought to bear on the proper diseased tissues or assimilative surfaces. Such a drug carrier is called a vehicle. The common substances used as vehicles are water, syrup, sugar of milk and oils.

Drugs may be given by the mouth, per rectum or by hypodermic injection, and by inunctions.

Drugs given by the mouth usually are absorbed and taken into the circulation from the stomach. Drugs given on a full stomach are slowly absorbed, on an empty stomach usually rapidly absorbed. Where drugs are intended to reach the bowels as Bismuth in diarrhœa, they are best given about two hours after a meal, that they may pass with the food into the intestines, and not wait the delay of digestion in the stomach.

Drugs given per rectum are best given in suppository or in enemata. The hypodermic injection of drugs is best accomplished by using regularly prepared hypodermic tablets. The injection should be on the arm, thigh or calf of the leg. Avoid large veins and vascular areas, for it would be dangerous to inject a drug directly into the circulation. Medicated ointments, as a rule, are applied with friction to the part with which it is desired to bring the drug in contact.

Drugs having opposite actions should not be given at the same time, as they may counteract each other in effect, and, if chemically opposite, they may produce a new and unexpected substance as the result.

In books, as a rule, the smallest dose that will produce the full effects of the drug is given, and also the largest dose that is safe to administer to a strong man at one time, is also given. The age, the vital powers and the condition of the patient with regards to the effect of drugs already in the system must determine the size of the dose. To find the dose for a child this (Young's) rule is a good guide. Use the age of the child as the numerator of the fraction, and the age of the child plus 12 as the denominator, and reduce the fraction, the result will be the approximate dose for the child. Example:

$$\frac{\text{2 years}}{2 + 12} = \frac{1}{7}$$

the dose of an adult.

VARIATIONS OF THIS RULE.—Children are very susceptible to the stronger narcotics, such as Opium or Laudanum, and the dose must be much smaller than this rule would indicate. According to this rule a child of 6 months would get about one-sixth the dose of Laudanum for an adult, when, in fact, he can stand but about one-twentieth the dose. So also a

child will not be affected in a purgative manner by one-sixth the dose of Castor Oil, but requires more of the purgative drugs. Then give children much less than this rule indicates of the narcotics and opiates, and considerably more than the dose indicated by this rule of the purgatives.

Women take smaller doses than strong men. Some people are very susceptible to certain drugs, and the use of such drugs must be with caution where the patient is susceptible, as, for instance, Belladonna and light-haired, light-complected women.

Above all things consider an unlabeled drug rank poison and you will be saved trouble and sorrow.

In giving homœopathic drugs according to the indications there should be at least three marked symptoms calling for the drug. If two or three drugs have the same symptoms indicated in disease take the one that has the most symptoms indicating the drug.

$\theta$ indicates the homœopathic tincture. x indicates $^1/_{10}$ as much as is found in the tincture. 2x indicates $^1/_{10}$ as much as is found in the x, or $^1/_{100}$ part as much of the drug as is found in the tincture. For acute conditions it is best to give the $\theta$ (tincture) or the lower dilutions, as is represented by the smaller figure in front of the x. For chronic conditions, where the drug is to be given repeatedly for

days, the higher dilutions, or weaker preparations as represented by the larger number in front of the x, should be given. It is not necessary that all the indications given under any drug should be present before that drug is given. Three prominent symptoms should be present out of all given to make the selection a good one.

### DULCAMARA (HOMŒOPATHIC).

DOSE.—IX to 6x, 1 tablet every three hours.

INDICATIONS FOR DULCAMARA.—Swelling of the glands, eruption resembling hives, diarrhœa, worse in damp, cold weather.

In women an irritable disposition, suppressed menses; the coming of the flow is always preceded by the appearance of a rash on the skin of the body.

Dulcamara is good for rheumatism or diarrhœa, made worse by damp, cold weather, or the suppression of the flow from the same cause. Affections of the skin, mucous membranes and muscles that are made worse in damp, cold weather will usually be benefited by Dulcamara.

### DIGITALIS.

DOSE.—Tr. Digitalis, 2 to 20 drops. Fluid Extract Digitalis, 1 to 2 drops.

Digitalis slows the pulse and raises the blood pressure. There is an accumulative

action of Digitalis that may, when least expected, after the drug has been given for some time, produce alarming symptoms.

Digitalis is indicated where the pulse is rapid and soft, when there is shortness of breath on exertion, palpitation of the heart from emotional excitement, poor circulation, with cold hands and cold feet. Three to 5 drops of the Tincture of Digitalis will often relieve many of these symptoms. Give twice or three times a day for not more than a week at a time.

## EMETICS.

Emetics are drugs or substances used to produce vomiting.

Vomiting may be produced by a drug that acts on the brain center, or by drugs that irritate the stomach or intestines and act through the nervous system to cause the emptying of the stomach.

Drugs that act on the brain centers are the most prompt and reliable.

℞. Apomorphine hydrochlorate, $^1/_{10}$ part of a grain.

Given preferably hypodermically; but will act if given internally by the mouth. Repeat the dose in ten minutes if by the first dose emesis is not produced.

To cause vomiting by irritation of the nerves of the stomach.

Give

℞. Syrup of Ipecac, from 15 drops to 2 teaspoonfuls, according to the size of the patient. Repeat the dose in fifteen minutes if necessary.

℞. Brown Mustard, 1 teaspoonful; stir well into a cup of warm water and drink. Repeat in fifteen minutes if necessary.

The stomach may be emptied by having the patient drink a cup of tepid water, and then irritate the throat with the finger or a feather.

### ENEMATA.

An enemata may be administered to relieve constipation, to check hæmorrhage from the lower bowel, to supply food when the stomach cannot retain food and to administer drugs and to relieve thirst when water cannot be given by the mouth. An enemata for an infant is about 1 ounce; for a child of two years, 2 or 3 ounces, and so on, a little more than an ounce to the year. Adults should receive from 1 to 2 pints, and where it is desired to reach the upper bowel more must be given. In the giving of an enema the first thing is the value of time. Rapid distension of the bowel usually calls for an immediate evacuation before the object sought can be secured. Have the patient lie on the left side or on the back, elevate the hips a little that

gravity may assist the retaining of the injection. Inject slowly and if necessary support the parts that the fluid be retained. By stopping the stream the bowel has time to regain itself and the fluid to pass up further, relieving the desire to stool, then more can be given. An enema for the relief of constipation is best if retained about fifteen minutes. Medicated enemas are small and fully explained by the physician. Feeding or nutritive enemas are used when the stomach for some reason cannot retain food. The amount is always small; for an adult, say, ¼ of a pint, and fo ra child a smaller amount in proportion to its age. Nutritive enemata may be of milk, beef tea, of broth or gruel, or enemata of eggs and milk. To all nutritive enemata should be added pepsin, 1 grain to the ounce, to digest the food since the lower bowel cannot digest well. From 1 to 4 teaspoonfuls of brandy or whisky can be added to the nutritive enema as a stimulant if desired and ordered by the physician. Wash out the bowel before giving a nutritive enema, and again before giving a second feeding injection.

Nutritive enemata should not be given oftener than once in three hours. Injections to quench thirst are of pure water and larger than nutritive enemata, or about ½ to 1 pint should be given. All enematas should be of a temperature of from 80 to 100 degrees F.

unless ordered cold, as is sometimes done, to stop hæmorrhage from piles.

FERRUM OR IRON.

DOSE.—Blaud's Iron pills, 1 pill after meals.

The action of Iron in the system is to cause those suffering from a want of the red blood corpuscles to become more rich in this particular element of the blood.

Anæmic or white, bloodless persons often rapidly improve under the influence of Iron.

Women and girls, who do not menstruate because the system has no blood to spare, menstruate when the system has become enriched and the blood is back to the normal standard as a result of taking Iron. Iron is not the only remedy for anæmia, but it is a valuable remedy.

FERRUM METALLICUM (HOMŒOPATHIC).

DOSE.—IX to 6x, 1 tablet three times a day.

INDICATIONS FOR FERRUM.—The Ferrum patient is dizzy on descending a hill or crossing water. The face is pale and may be yellow-spotted. Excitement causes flushes of the face. The stomach feels as if pressed upon after eating. There is belching of sour undigested food. The patient may vomit the food in almost the same condition as it was when eaten. In the intestines the indigestion is marked and the bowel movements may contain the food unacted upon. In the morning there is a

spasmodic cough, caused by tough mucus. In men there may be impotence and nocturnal emissions. In women the flow may be preceded by strings of mucus or a milky leucorrhœa. Headache and ringing in the ears. The flow is too profuse, too often and lasts too long.

The Ferrum patient is better from walking around and is subject to flushes of the face as a result of excitement or from pain.

### FOOD FOR THE SICK.

There is often much misunderstanding between friends and physicians as to what and why foods should be given as they are. To force onto the stomach foods that it cannot handle is not to be desired. Sick people cannot digest, as when well, and the giving of food should be regulated that the most strength be secured with as little taxation of the digestive organs as is possible from the food given.

### BARLEY SOUP.

Wash 1 tablespoonful of barley in cold water, cover with boiling water, let boil up once and drain off. Cover again with boiling water and boil slowly for two hours, drain and add to meat broth or stock, and let stand on back of stove for ten minutes, salt to taste and serve. The stock can be made from game

or beef. Do not add much spice to the beef or game in making the stock. Use 1 pint of stock for the barley indicated above.

### BARLEY WATER.

Stir into 1 pint of cold water 1 teaspoonful of ground barley and a pinch of salt, boil for ½ hour, strain and keep in a cool place ready for use.

### RICE SOUP.

Wash 1 tablespoonful of rice in cold water. Boil slowly in 1 pint of water for thirty minutes, drain and add to 1 pint of rich meat broth the same as with barley.

### PEPTONIZED MILK.

Stir 5 grains of pepsin and 15 grains of soda bicarbonate (baking soda) in 4 ounces of water, mix well with a pint of milk and let stand in a warm place for ½ hour, then bring to a boil for two or three minutes and place on ice until used, sweeten to taste.

This may be used in nutritive enemata, in milk punches and where milk is used as food.

### MILK PUNCH.

To a half pint of fresh milk add 2 teaspoonfuls of sugar and add from 4 to 8 teaspoonfuls of brandy, stir well. If condensed milk is used no sugar need be added.

### EGG-NOG.

To a well beaten egg add a teaspoonful of sugar and 4 teaspoonfuls of whisky or brandy and add to ¾ cup of fresh milk. (If condensed milk is used omit the sugar.)

### TEA.

Use to each cup of tea (½ pint) a teaspoonful of tea, put tea in the pot and add the boiling water, set back where it will keep hot, but not boil.

### COFFEE.

To each pint of coffee use 2 heaping teaspoonfuls of coffee finely ground, mix the ground coffee in a little cold water, place in the pot and pour on it a pint of boiling water. Let boil up twice and add a little cold water and set back where it will remain hot, but not boil, for five minutes more while it settles. Put cream and sugar in the cup and then pour on the coffee.

### IN THE FEEDING OF THE SICK.

Avoid things prepared in the frying pan, have each article well done before serving. Feed the sick regularly, but not too much at one time. Do not give acid fruits or foods with milk, starches, puddings and gruels.

Acid fruits or foods go with meat and the albumens, and not with the starches.

### POTATOES.

Baked potatoes, boiled potatoes and mashed potatoes are all good articles of diet for the sick.

### EGG CUSTARD.

Beat 1 egg well and add a teaspoonful of sugar and a little salt, and add this to 1 cup of scalded milk, stirring well until thick; the milk should be in a receptacle that is resting in boiling water or a farina cooker. Pour in small dishes and set aside and serve cold.

### GELATINE.

Gelatine is a very agreeable and nutritious food and should like beef extract be kept on hand for sickness. Knox's gelatine is as good as any. All have recipes on each package, which, if followed, makes delicious gelatine.

### BEEF TEA.

The extract in jars is very reliable and good to have in the house, but the freshly prepared tea is often preferable. Take a pound of fresh, lean beef, slice thin and pound well or grind through a sausage mill.

place in a pint of cold water and bring slowly to a boil, skim off, strain, season with a little salt and serve.

### CHICKEN, GAME OR MUTTON BROTH.

To a pound of the game or meat cut in small pieces add a quart of cold water, bring slowly to a boil and let simmer for two hours in a closely covered kettle, strain through a sieve and let stand a few moments, skim off the fat, salt to taste and serve. A teaspoonful of rice can well be added to each pound of meat if desired, as well as a little pepper.

### MILK.

Fresh milk is often used as food for the sick; sterilized milk is very much to be desired. Milk may be sterilized by placing the bottle in a steam sterilizer for a sufficient time to thoroughly cook the milk, or in a pan of boiling water. Milk should boil or steam until brought to the boiling temperature for several minutes.

### RICE PUDDING.

Wash ¼ cup of rice in cold water, add 1 quart of cold milk, sugar to taste, and add ½ teaspoonful of salt, grate a little nutmeg over it, and bake slowly for three hours in a pudding pan; stir occasionally while baking.

### FARINA GRUEL.

Sprinkle slowly 1 teaspoonful of farina into a pint of boiling milk, stir well to prevent lumps; boil slowly for ½ hour; salt to taste and serve.

### OATMEAL GRUEL WITH MILK.

Soak ½ pint of oatmeal in a quart of water for ten hours; if dry add a little more water and boil for an hour, strain and add 1 pint of boiling milk; bring this to a boil and salt to taste.

### BOILED FLOUR GRUEL.

Moisten 1 pint of flour with enough water to make it into a ball and tie it up in a piece of muslin, and then moisten the cloth on the outside and paint with flour, then boil the ball of flour ten hours, and remove the cloth and dry the flour ball in a slow oven for eighteen or ten hours. When desired to make gruel, grate from the ball two teaspoonfuls of this boiled flour, mix to a paste in cold water, and stir into ½ pint of boiling milk, boil slowly for three or four minutes and serve. If condensed milk is used no sweetening is needed, but if fresh milk, sweeten to taste.

### CREAM TOAST.

Use two slices of stale bread, dry well in

oven, toast to even brown over fire; place in dish and pour over it boiling water; let stand a minute, drain off, and butter and salt a little, and pour over it a little fresh cream; place again in the oven for a few minutes until hot and serve hot.

### PLAIN TOAST.

Plain toast is made as directed above, only no water is poured over it. The toast is buttered and salted and served dry while hot.

### GELSEMIUM SEMPERVIRENS (HOMŒOPATHIC).

DOSE.—*θ* to 3x, 2 tablets every two to four hours.

INDICATIONS FOR GELSEMIUM.—Confusion of the mind, fullness of the head, frontal headache and hot face, chilliness of the body, the eyes are heavy and there is drooping of the eyelids, dimness of vision, with aversion to light; dry lips, hot tongue and fullness of the throat, running of the nose, sour belching, diarrhœa from excitement or emotion, pain in the chest and in the region of the heart, lassitude, profuse urination of clear urine. In men involuntary emissions, followed by debility and low spirits. In women suppressed menses, with headache. Labor-like pains during pregnancy. A good remedy early in colds, with running of the nose.

### GRAPHITES (HOMŒOPATHIC).

DOSE.—1x to 6x, 1 tablet three times a day.

INDICATIONS FOR GRAPHITES.—Feeling as if intoxicated, rheumatic pains of half of the head, extending into the teeth; sound in the ears as of the report of a gun, eruption back of the ears, soreness of the eyes and aversion to light, nausea after eating, with distended feeling of the abdomen; constipation associated with shreds of mucus. In women morning sickness during menstruation, pain in the left ovary, suppression of the menses, with heaviness and weight of the limbs; leucorrhœa that is thin and white and excoriates the vagina, disposition to delayed menstruation, symptoms worse in the evening.

### GUAIACUM (HOMŒOPATHIC).

DOSE.—$\theta$ to 3x, 2 tablets every three to six hours.

INDICATIONS FOR GUAIACUM.—Sore throat, with little constitutional symptoms; right side of the throat most affected, tonsils enlarged, especially the right tonsil; stinging, sticking pain in the throat, worse in a warm room, veins of the throat are enlarged, threatened quinsy, rheumatism of the joints, with distension and distorsion of the joint.

Vague growing pains in children.

## HEPAR SULPHUR (HOMŒOPATHIC).

DOSE.—1x to 6x, 1 or 2 tablets three times a day.

INDICATIONS FOR HEPAR SULPHUR.—Sadness and dejected spirits, anguish of mind, dizziness on riding in the cars or from shaking the head, pain in the eyes, things look too large, purulent inflammation of the eyes and ears, pain in the bones of the head and face, soreness and roughness of the throat, with pain extending into the ears on swallowing; longing for acid foods, distension of the stomach, stitches in the liver, swelling of the glands of the neck and groin, sour undigested diarrhœa, burning on urinating, dark hot urine excoriating the urinary passage. In women between the menses there are discharges of bloody mucus, dry, hoarse cough, loss of voice, rattling in the chest in the morning, wheezing during the act of breathing. Hepar sulphur is the prime remedy where suppuration is threatened, either in the throat, the eyes or ears, or on the surface of the body, as in abscesses, ulcers or boils. Give the 4x or 6x to prevent suppuration and the 1x to hasten the breaking down and discharging of pus, as is sometimes wished in boils and quinsy. Give 1 or 2 tablets three times a day, or, if the case is urgent, every three hours.

Ferrum phosphoricum should be mentioned along with Hepar sulphur, as Ferrum phos. 1x to 3x every three hours is a very good remedy to ward off inflammation when after injury or exposure inflammation is expected but is not yet present.

HYDRASTIS CANADENSIS (HOMŒOPATHIC).

DOSE.—θ to 3x, 1 to 3 tablets three or four times a day.

INDICATIONS FOR HYDRASTIS.—Feeling as if intoxicated, irritable, forgetful, dull frontal headache, eczema around the roots of the hairs of the forehead, watery excoriating nasal discharge, sneezing, tenacious discharge into the throat from the nose, hawking, sore spots on the tongue and cheek, swollen tongue, showing the imprints of the teeth; tongue coated gray or yellowish, all-gone feeling in the stomach, with dull, aching pain; constipated, stools covered with mucus, at times diarrhœa of a chronic character and there is an associated pain in the lower bowel, with scalding and burning after movement; urine dark and has a stringy sediment, dull aching in the bladder and kidneys; the cough of Hydrastis is dry and harsh, with rawness and soreness of the chest; tickling in the throat that may make the eyes water, thick, tenacious yellow-colored sputa. In men thick, yellow, painless discharge from the penis. In wo-

men thick, stringy, yellow discharge from the genital tract. Ulceration of the genital tract.

Hydrastis is a drug for chronic nose and throat trouble, chronic gastric catarrh and chronic catarrh of the bowels; also, of the genito-urinary tract. Remember, that the discharge of Hydrastis is yellow, thick and tenacious.

### HAMAMELIS.

DOSE.—Ten to 30 drops of the fluid extract three or four times a day.

Hamamelis is a good remedy for blood spitting in 5 to 10 drops every two or three hours until better.

Itching or painful piles are much relieved by bathing them in a warm solution of Hamamelis and hot water of equal parts.

For diseases of the vagina, with a white, milky discharge and a heavy, sore feeling of the womb and pain in the back, Hamamelis 1 ounce to the pint of hot water makes a very soothing and healing injection.

Hamamelis is a very soothing application when rubbed on bruised or injured surfaces or used as wet dressing to injured parts. Hamamelis acts much the same as Arnica, and is safer where the skin has been broken, for Arnica has been known to set up erysipelas when applied to areas where the skin has been broken.

HYOSCYAMUS NIGER (HOMŒOPATHIC).

DOSE.—$\theta$ to 6x, 1 to 3 tablets every three or four hours.

INDICATIONS FOR HYOSCYAMUS.—Muttering delirium, with pricking at the bed clothing; does not recognize friends, fear of being poisoned, may become furious and use indecent language and be immodest; there is sparkling eyes, red face and congestion of the brain; objects appear red or double, blinking of the eyelids, tongue dry and clean, yet the patient may foam at the mouth and swallow with difficulty; there is thirst, but the patient dreads to drink and drinks very little at a time with apparent difficulty; there may be involuntary movements of the bowels of a yellow, watery nature; the urine may pass without the knowledge of the patient or be very scarce and at times suppressed; there may be spasms during sleep, dry, spasmodic cough, relieved by sitting up; slow breathing, with rattling in the chest; in fevers the pulse is hard and full; congestion of the brain, with hot head and face, though the hands and feet may be cold; hot all over the body in the evening, perspires during the sleep and feels weaker after perspiring, desires to be uncovered or to be naked.

Hyoscyamus is often indicated during the delirious stage of typhoid fever and for de-

rangement of the mind, with hallucinations and imaginings and glassy eye, jealousy and talkative and silly, goes rapidly from one subject to another, is obscene of speech and immodest in actions; insanity, delirium and jealousy often call for Hyoscyamus.

## LOCAL USE OF COLD AND HEAT.

Poultices applied to inflamed and painful parts afford much comfort and often hasten restoration. Flax seed, oat meal or bran may be used. Stir whichever ingredient is to be used into boiling water until a thick pap is formed, spread on muslin and smear the surface with lard or sweet oil, cover the outside with oiled paper and several folds of flannel to retain the heat and moisture. Oiled silk or oil-cloth may be used instead of paper if handy. Poultices should be applied hot and changed frequently. Several folds of cloth wrung out of hot water and applied hot can be used much the same as poultices. Often drugs are added to the water, making the application of hot fomentations of double value. Cold applications are used in the early stage of bruises and strains. Several folds of cloth are rung out of ice water and applied in the same manner as hot fomentations, only there should be no covering to retain heat. Hot pads of salt or sand are often used where dry heat is wished to a painful part. The hot

water bottle or bag is the most frequent application to supply heat to the surface. As a rule these bottles are of rubber, but common bottles may be used in their absence. Care should be observed not to burn the patient. Those coming out of ether have frequently been burned by careless nurses. Cover the hot water bottle with some woolen cloth and keep to the desired heat by changing the water. A quite cold, or quite hot, fomentation applied to the chest on retiring will often stop an irritating cough that prevents sleep.

### IODOFORMUM IODOFORM.

Iodoform is in small, lemon yellow crystals and has a very tenacious and insuppressible odor. Iodoform has been used as a drug, but its chief field of action is as a local dressing for wounds. Applied to wounds or sores the effect is to ease the pain, cleanse the wound by the liberation of its Iodine under the influence of heat and moisture of the body and to stimulate the injured tissues, thus hastening healing. Continued for a long time or used in large quantities over extended areas there is danger of poisoning from the drug.

The symptoms of Iodoform poisoning which require its immediate cessation are headache, loss of appetite, rapid pulse, depression, drowsiness and faintness or marked restlessness. There is delirium in the later stages

of poisoning from this drug. The temperature is not much raised by this drug. On small wounds the pure drug may be used, but on large injuries it is best used one part of Iodoform with two parts of Boracic Acid.

### IODUM. IODINE.

This drug should be preserved in glass-stoppered bottles in a cool place. On removing the cork Iodine gives off a purple vapor.

Tincture Iodine painted on sprains and subcutaneous swellings is of much service as a counter-irritant. Enlarged, inflamed and hardened glands are often reduced and softened by the local use of this drug. In a region affected by erysipelas iodine is often of much value when painted around the inflamed area that the infection does not spread to healthy parts of the body.

The benign action of Iodide of Potassium on enlarged glands, when taken internally, is due to the Iodine.

Iodoform owes its kind action over wounded areas to the fact that the Iodine is liberated from the Iodoform by the action of heat and moisture in the wounded area.

Constitutional symptoms are sometimes produced by the use of Iodoform on wounds and by the use of the Iodides internally. A mild iodism is often produced, having some or all of the following symptoms: Pain over the

eyes, soreness and heaviness of the mouth and throat an excess of spittle and perhaps an eruption over the body. If these symptoms become worse and others develop, the drug should be discontinued or much reduced in dose.

### IPECACUANHA.

Dose.—Fluid Extract of Ipecacuanha, 2 to 5 drops.

Syrup of Ipecac, 5 drops to 1 teaspoonful.

Wine of Ipecac, 5 drops to 1 teaspoonful.

To cause vomiting, ½ to 4 teaspoonfuls of the Wine or Syrup; repeat in fifteen minutes if necessary.

In the larger doses Ipecac is given as an emetic to produce vomiting, and is a safe and reliable remedy.

From 3 to 5 drop doses of the Wine or Syrup of Ipecac will at times relieve an irritated stomach when there is a tendency to vomit. Also 3 to 5 drop doses will often be of much service for summer diarrhœa. Give for nausea or diarrhœa a small dose, and repeat every fifteen minutes to a half hour.

Where there is a dry hacking cough that ought to be loosened up give from 5 to 15 drops of the Syrup of Ipecac every 3 hours. Ipecac in mild doses increases the action of the skin, and is, therefore, all the more of value in the treatment of colds.

For croup in children, 10 to 15 drops of the Wine or Syrup of Ipecac, repeated every 15 minutes until nausea or vomiting is produced, is a very efficacious remedy.

### IPECACUANHA (HOMŒOPATHIC).

DOSE.—$\theta$ to 3x, 1 to 5 tablets every 15 minutes to every 3 hours.

INDICATIONS FOR IPECAC.—Headache, bruised feeling of the head, worse on one side. Pale face with blue rings around the eyes and mouth. Flat taste in the mouth with nausea and fulness of the throat. There is a continual aversion to food with a feeling as if the patient would vomit. Pain in the stomach with nausea, worse on motion. Diarrhœa of green, fermented, slimy stool, with cutting and burning in the lower bowel and rectum at the time of stool.

Dark urine which leaves a brick-dust sediment. Rattling of the chest on breathing, and the chest seems full of phlegm. Difficult cough with little expectoration, and cough causes nausea. The throat seems too small for the air and phlegm to get through, and there is a blueness of the face during coughing.

The menses are too frequent, too early, too profuse, and are of a bright red blood.

Remember Ipecac for croup of children, cough with difficult breathing and little ex-

pectoration. Ipecac is of service in all derangements of the mucous surfaces of the body associated with nausea.

For cough, give θ or 1x, 1 tablet every 2 hours. For croup, give of θ 2 tablets every 15 minutes, until better.

For diarrhœa or nausea give θ or 1x, 1 tablet every two hours.

### IGNATIA AMARA (HOMŒOPATHIC).

Dose.—θ to 6x, 1 tablet three times a day.

Indications for Ignatia.—Depression of mind, easily angered. Sensation as if a nail were driven in the side of the head. Aversion to light. Toothache as if the tooth were crushed. Stitches in the throat and a feeling as if there were a lump in the throat. No taste to the food. Empty feeling in the stomach. Pricking, stinging pain in the stomach as if from pins. Difficult stool as if the anus were too small, with sticking pain in the anus after a movement. Protrusion of piles with sticking pain. Cough with stitch-like pain in the chest. Palpitation of the heart with sticking pain in the heart.

The menses in women are delayed, scant, dark in color and of an offensive odor. Cramp-like pains in the uterus at the time of the menses, and at the same time there is indigestion with cramp-like pain in the stomach. Weakness and languor as if the woman could

not go around, and yet she refuses to give up and rest.

Ignatia is a good remedy for women who are dark of complexion, and who do not give up and cry as do the Pulsatilla patients; but who are, as it were, angered by their symptoms and who refuse to yield to them. Remember the sticking or stitch-like pains of Ignatia.

### KALI BICHROMICUM (HOMŒOPATHIC).

DOSE.—2x to 6x, 1 tablet three times a day.

INDICATIONS FOR KALI BICHROMICUM.—Vertigo, dull, throbbing frontal headache. Heaviness of the eyes on waking in the morning. Swelling of the eyelids. Dryness and ulceration of the nose with the formation of crusts. Greenish-yellow, offensive discharge from the nose. Tough, yellow, stringy discharge into the throat from the posterior nares. Thick, yellow coating of the tongue. Inflamed tonsils that are covered with a stringy mucus that is hard to dislodge. Hoarseness of the voice in the evening. Tickling of the throat. Cough with difficult expectoration. Pain back of the breast bone extending between the shoulders. Desire for acids and sour foods. Indigestion. After eating, fullness and distension of the abdomen. Cutting pain in the abdomen and stitch-like pain in the region of the liver. Constipation. Movements are dry

and lumpy, and are followed by burning in the anus.

In women there is a yellow, stringy leucorrhœa that scalds and burns the parts. Soreness of the genital tract.

Remember Kali bich. when there is a tenacious, stringy discharge from any of the mucous surfaces.

Fat, fair children often have symptoms calling for this drug.

### KALI CARBONICUM (HOMŒOPATHIC).

DOSE.—2x to 6x, 1 tablet three times a day.

INDICATIONS FOR KALI CARB.—Headache when on the cars. Headache on one side of head. Tendency to take cold in the head. Redness of the eyes. Sticking of the eyelids together in the morning. Spots before the eyes. Swelling of the upper eyelids. Cracking sound in the ears. Ulcer of nose. Desire for sour foods. Constipation with colicky pain before stools. Large movements passed with white mucus. Burning in the anus after stool. Hoarseness of the voice. Dry, hard cough. Stitches in the right side of the chest, in the heart, in the liver and in the kidneys and back. Swelling of the glands of the neck. Pain in the limbs. Rheumatic pains extending down the arms and legs. The sexual desire is weak. The menses too late, too scant and too light in color. Leucorrhœa with pain in the back.

LYCOPODIUM (HOMŒOPATHIC).

DOSE.—2x to 6x, 1 tablet three times a day.

Headache worse from stooping or lying down. Pain in the temples as if the sides of the head were pressed in a vise. Indifference of the mind with a tendency to cry. Wants company, cannot bear to be alone. Sleepy in the day, and cannot sleep at night. Roaring in the ears. Sallow color with dark rings around the eyes. Sense of smell very acute. Difficult breathing with motion of the angles of the nose during the act of breathing. Toothache, dry tongue. Sore throat with spots or ulcers on the tonsils. Intense hunger, but there is a bloated sensation as soon as a little food is eaten. Windy rumbling of the bowels. Constipation, and when the bowels do move there is still a feeling as if the bowel was not empty. The urine is scant and soon deposits a yellow, sandy sediment. Before voiding urine there is intense pain in the bladder. Cough worse in the evening, associated with stitch-like pain in the left side of the chest. Salty tasting, thick, yellow expectoration from the chest and nose.

Stiffness of the neck with swelling of the glands. Pain in the small of the back. Itching of the skin. Dry, harsh, cracked skin. Redness and swelling of the joints. Pain in the hip-joint. Ulcers on the limbs that itch and burn at night.

### LACHESIS (HOMŒOPATHIC).

DOSE.—6x. 1 tablet three times a day.

INDICATIONS FOR LACHESIS.—Giddiness and heaviness of the head. Headache with nausea and chilliness. Tendency to be sad with indisposition to think. Burning in the mouth with dry, trembling tongue. Pain in the left side of the throat. Sensitiveness of the throat, cannot bear to have the collar touch the throat. Bitter taste to everything that is eaten. Food comes back into the throat after being swallowed. Burning and griping in the abdomen. Alternating constipation and diarrhœa. The urine is dark or yellow, and there is a sensation as if a lump were in the bladder. The left ovary is swollen, with sharp, stitching pains. Cough with pain in the left side of the chest. Cough worse in the morning. Neck very sensitive, and slight pressure on the throat causes severe coughing. Ulcers of the skin that are tender and burn after being dressed. Offensive discharge from very sensitive ulcers.

The Lachesis patient is of depressed spirits. Always worse after sleep. The surface of the body is tender to touch. The left side of the body is more affected than the right.

### MERCURIUS CORROSIVUS (HOMŒOPATHIC).

DOSE.—3x to 6x, 1 tablet three times a day.

INDICATIONS FOR MERCURY.—Anxiety, sleepless. Vacant, stares at persons and does not understand. Dizziness. Sore eyes with edges crusted. Sore nose with dry scabbing. Burning in the mouth and stomach. Sore throat. Ulcerated tonsils. Diarrhœa with cutting, colicky pains. Dark urine that leaves a brick-red sediment.

### CORROSIVE SUBLIMATE (ALLOPATHIC).

The Bichloride of Mercury is used as an antisyphilitic in doses of $^1/_{100}$ part of a grain, three times a day.

The Blue Ointment of Mercury is also used as an antisyphilitic, and to reduce swollen glands. Used by rubbing in well once or twice a day.

Corrosive Sublimate is also used as an antiseptic, but in the quantity needed as an antiseptic it is a violent poison.

### NUX VOMICA.

DOSE.—Tr. Nux vomica, 1 to 10 drops, three times a day.

Strychnine Sulphate, $^1/_{100}$ part of a grain, three times a day.

Nux vomica stimulates the heart and nerve centres. The spinal cord in particular. Increases and strengthens the pulse. Quickens and deepens the breathing. Increases the action of the stomach and bowels. Nux vomica

exerts a tonic effect on the heart, lungs, digestion and nervous system.

For heart failure from accident or injury 10 drops of the Tincture of Nux vomica, or $^1/_{60}$ part of a grain of Strychnine sulph., will strengthen the heart's action.

For numbness and paralytic affections following diphtheria, scarlet fever and allied affections, Nux vomica has a strong restorative action on the nerves. Give 3 drops of the Tr. Nux vom. three times a day, and if necessary, inject a small amount into the paralyzed area, using the Strychnine sulph., and giving the same with a hypodermic syringe. For chronic constipation or those suffering from a relaxed condition of the abdomen. The aged or fat, flabby people, give Tr. Nux vom., 3 drops, three times a day.

For chronic dyspepsia, 2 to 4 drops of the Tr. Nux vom. before meals will aid digestion very much. After dinner if there is indigestion, the same dose will help to stimulate the stomach to get rid of its burden.

If, after giving Nux vom. for some time, there is twitching of the limbs, acute vision, restlessness and a stiff neck, you may know there has been enough of the drug given, and it should at once be discontinued.

NUX VOMICA (HOMŒOPATHIC).

DOSE.—$\theta$ to 6x, 1 to 4 tablets three times a day.

INDICATIONS FOR NUX VOMICA.—Irritable, easily angered. Noise, light and strong odors are unbearable. Wishes to be alone. Mental derangement with a desire to kill. Delirium from alcoholic drinks. Pain on top of the head as if a nail were driven in. Head feels too large. Dizziness and ringing in the ears. Bloodshot eyes or bloody spots in the membranes of the eye. Running of the nose in the day and dryness of the nose at night. Sallow, pale complexion. Can't sleep after 3 A. M. Sore spots in the mouth. Sore throat. Rawness of the throat on swallowing. Tongue coated black. Bitter taste in the mouth and offensive breath. Sour belching. Stomach painful to pressure. Clothing feels too tight. Fullness after eating, with feeling of pressure on the stomach. Cramp-like pain in the stomach and abdomen. Constipation with difficult passage of stool. Pain in the rectum with a tendency to hæmorrhoids. Difficult urination of a small amount of bloody urine. Dry cough, worse in the early morning, worse from eating and worse from lying on the back. Chest feels as if being pressed upon by a heavy load. Pain in the neck, between shoulders and back of the shoulder-blades. Pain in the back. Numbness of the limbs.

In men pinching, constrictive pain in the testicle. Pain in the back from weakness and

nervousness from over sexual indulgence or from nocturnal emissions. In women the menses are too early, too excessive, and of dark or black blood. Irregular menstruation. Vomiting of pregnancy. Threatened miscarriage with a desire to urinate and move the bowels at frequent intervals.

Remember Nux vomica for dark complected persons who cannot sleep. For irritableness and indigestion, and for the bad effects of over-indulgence in any way.

### OPIUM.

Opium is the gum from the Papaver somniferum, a plant of Asia. The extended use of the drug in medicine in many forms, and in its various alkaloids, also its combination with other drugs, makes it a very valuable drug and one worthy of careful consideration.

The great tendency to form the drug habit makes it a drug to be feared, and used with great caution by physician and patient.

The many fatal results from its use should make all think twice before prescribing it.

Opium, Morphine and Tr. Opii or Laudanum are all one in their results so far as the danger from the use of the drug goes. There are many alkaloids of Opium, but for this present subject in hand they will not be mentioned. Children and the aged are very susceptible to Opium in any and all of its

forms and preparations, and its use for such persons should be very urgent before the drug is employed, as small doses have proven fatal when none suspected that there was any danger.

Dover's Powders, Brown mixture, and the various cough compounds have Opium as one of the most active ingredients.

Morphine is the active principle or alkaloid of Opium, and has much the same action as the crude drug.

Laudanum or Tr. Opii retains all of the active principles of Opium, and should be used as nothing more or less than Opium.

In medical doses the effect of Opium is first to produce a short period of exhilaration or excitement followed by drowsiness, and an almost irresistible desire to sleep. The sleep, however, is not natural, as the drug continues its exciting influence on the brain; dreams chase each other through the mind, or a gentle revery seizes the sleeper and the mind follows up the phantom dream, forgetting all else. An itching or tingling of the skin is one of the first symptoms that the drug is beginning to act.

In overdoses the sleep is profound, following very soon upon the first stage of excitement. Snoring or stertorous breathing is marked, and the pulse, though weakened, is full and slow. There is almost total insen-

sibility to external impressions. In the latter stages of poisoning the pallid countenance is very marked and the face is bathed in a clammy sweat.

Where an overdose of the drug has been injected from whatever cause the first thing to be done is to empty the stomach by an emetic of mustard and Ipecac, or by the use of Ipecac alone, or by any other good and prompt emetic. Strong black coffee should be given internally, and the patient kept from going to sleep by being walked about, and also by striking him with a wet towel, or, in fact, any device to prevent sleep. To stimulate the lungs and the breathing, Atropine Sulphate should be given hypodermically, $^1/_{50}$th part of a grain. Where there has been much of the Opium taken there will be need of more than $^1/_{50}$ grain of the Atropine. Hypodermic injections of the 1 per cent. solution of the Permanganate of Potash is also of service.

Opium is contra-indicated in all diseases of the brain, and in any affection where there is much mental excitement. See Bromide of Potash for such cases.

The full medical dose of Opium is 1 grain, of Morphine Sulphate ¼ grain, and of Laudanum 11 minims, or 22 drops. Try a smaller dose before using the full medical dose. Opium dries up the mucous secretions of the body and constipates the bowels. Babes have

been fatally affected by giving a nursing mother the full medical dose of the drug. Beware of the drug where there are children.

### POTASSII BROMIDE, BROMIDE OF POTASH.

Bromide of Potash is in colorless crystals, odorless and is salty of taste and is permanent in dry air.

The medical uses of the drug are to produce a quieting influence on the nervous system. It is of much value in the convulsions of children. Puerperal convulsions and general nervous excitement and unrest. The dose is from 20 to 60 grains for adults and 3 to 8 grains for children. In cases of convulsions the dose may be given every twenty minutes for 2 or 3 doses, and also it may be necessary to increase the dose a half or even give double the amount indicated.

Do not use the drug continually for weeks or months, as the drug habit may be formed.

### POTASSII IODIUM, IODIDE OF POTASSIUM.

Iodide of Potassium is in colorless translucent crystals, having a faint odor, pungent, salty taste that afterwards is bitter.

The drug is of especial value in syphilis and tubercular affections, glandular enlargements and as a tonic. Dose, from 3 to 10 grains three times a day well diluted in water.

### POTASSII CHLORAS, POTASSIUM CHLORATE.

Chlorate of Potassium is a colorless, pearly powder, odorless and salty of taste. The drug is chiefly used for sore mouth and sore throat. Tablets of from 3 to 5 grains may be held in the mouth and allowed to dissolve, thus bathing the sore or sores in the solution, after which it may be expectorated or swallowed at will. The continued use of the drug has a bad result on the kidneys and it should not be used over an extended period.

### POTASSI PERMANGANAS, PERMANGANATE OF POTASH.

Potassium Permanganate comes in deep purple crystals, having no odor. Is very soluble in water. The value of this drug is principally due to the amount of oxygen it carries. The drug is used as a disinfectant and deodorizer. Applied in a strength of 10 to 20 per cent. solution it disinfects, deodorizes and stimulates old or slow healing ulcers. In strong solution it acts as a caustic. Internally it has been used for the poisoning of Opium or Laudanum. It is best used for this purpose in the 1 per cent. solution hypodermically. The medical dose of the drug is from 1 to 2 grains. Alcohol decomposes the drug and should not be used in conjunction with Potassium Permanganate.

PHOSPHORIC ACID (HOMŒOPATHIC).

DOSE.—3x to 6x, 1 tablet three or four times a day.

INDICATED FOR PHOSPHORIC ACID.—Headache, worse from motion or noise; pain in the top of the head, low spirits, with no desire to talk; ringing in the ears, annoyed by a noise or conversation, stye on the eyelids, cold feeling of the eyes, dark-coated, dry tongue, with sticky mucus in the mouth; pain in the front teeth, bitter taste in the mouth, the stomach feels as if suspended, desire for juicy fruits or foods, cramp of the abdomen, watery diarrhœa, milky urine, pain in the back, soreness and weakness of the throat, hoarseness and tickling in the throat, causing cough; rash of the whole skin of the body, resembling scarlet fever.

Weakness and relaxation of the sexual organs, dragging, gnawing pain in the testicles, nocturnal emissions, weakness in the back and legs, itching and burning in the end of the penis.

Phosphoric acid is to be thought of in the nervous exhausted condition of homesickness, of over-nervous strain, for grief and anxiety and all debility with low spirits.

PHOSPHORUS (HOMŒOPATHIC).

DOSE.—4x to 6x, tablet every three to six hours.

INDICATIONS FOR PHOSPHORUS.—Dizziness on rising, dull headache, worse in the morning on rising from bed; wakefulness or very light sleep, but sleepy after meals; fearful of something in the distant parts of the room, noise in the ears, burning in the eyes, black spots before the eyes, halo around the lamp at night, nosebleed on slight provocation, dryness of the mouth and throat, tongue coated white, thirst for cold drinks, vomits when the contents of the stomach becomes warm, pain in the stomach, emptiness of the stomach, sour belching, waxy stools that are long and very difficult to pass, dark urine that leaves a brick dust sediment, pain in the back, dry, tight cough, hoarseness of the voice, stitches in the chest, rusty or frothy blood-colored sputa, cough excited by cold air or the use of the voice. Phosphorus is good in lower fevers, with involvement of the chest, night sweats, blue lips and open mouth and burning and itching of the skin of the whole body.

In the male there is irresistible desire for sexual satisfaction, but sexual power is wanting and the act may be a failure. Dreams, with emissions. In the female there is nosebleed instead of the menses at the time of the flow.

Remember Phosphorus for tall, dark complected persons and for men in particular.

PLUMBI ACITAS, SUGAR OF LEAD.

Sugar of lead is in colorless, transparent crystals, has a faint acid odor and a sweetish astringent taste. Should be kept in well-stoppered bottles, as it is acted upon by the air. Sugar of lead is soluble in water. In large doses internally the drug is an irritant poison.

Lead Water and Laudanum is one of the most useful preparations made from this drug.

Dressings saturated with Lead Water and Laudanum and applied to bruises where the skin is not broken, sprains and subcutaneous injuries are soothing to the pain and materially lessen the swelling.

The Lotion of Lead Water and Laudanum is made as follows:

℞. Sugar of Lead, 120 grains. Laudanum or Tr. Opii, ½ fluid ounce. Water, 16 fluidounces.

Dissolve the Sugar of Lead in 10 ounces of hot water, and then add the Laudanum and enough water to make 16 fluidounces.

Shake well before using.

PULSATILLA NIGRICANS (HOMŒOPATHIC).

DOSE.—θ to 3x, from 3 to 5 tablets every three to six hours.

INDICATIONS FOR PULSATILLA.—A weeping disposition, dizziness on rising, head feels empty, one-sided headache that is worse in the

evening and worse from lying down, better from sitting up and better from being in the open air, hardness of hearing, purulent discharge from the ears, the margins of the eyelids are sore, with a tendency to styes; green, offensive discharge from the nose, yellow or sallow complexion, with dark rings around the eyes; tongue coated yellow, sore throat, toothache, offensive taste in the mouth, with nausea; colic and rumbling in the abdomen, followed by diarrhœa; worse at night, frequent urination of clear urine, inability to hold the urine, dry cough when lying down, better from sitting up, hoarseness, stitches in the chest and in the region of the heart, tightness of the chest, sleepy in the day, but cannot sleep at night from the rapid change of ideas, restless, wakeful, frightful dreams.

In women the menses are too scant, appear too late and are associated with abdominal pain, bland, watery discharge instead of the flow, stoppage of the flow from exposure, nervous symptoms, but no flow in girls who should begin to menstruate, colic when the flow does come, so that the patient tosses about and may cry from the pain.

In men there is pain in the rectum and bladder, with a clear discharge; soreness and a sickening pain in the testicle. Pulsatilla is the remedy for light complected women who are sad, who flow late or the flow is scant,

who have dark rings under the eyes and who are tender in the abdomen at time of the flow. Pulsatilla is indicated for bland discharges from the eyes, ears, nose and genital tract and stoppage of the flow from exposure.

PHYTOLACCA DECANDRA (HOMŒOPATHIC).

DOSE.—$\theta$ to 3x, 2 to 4 tablets three times a day.

INDICATIONS FOR PHYTOLACCA.—Indifference of mind, with sick headache; backache and general exhausted feeling, watery discharge from the nose, one side of the nose clogged and the other open, sore throat that is dark red, excessive saliva in the mouth, swelling of the glands of the neck, goitre, bruised soreness of the stomach, with belching and vomiting of food, of bile or of slimy mucus, thin, dark stools; there is a bruised feeling of the muscles, worse in the house, worse at night and worse in damp weather, better from motion and from being in the open air.

In the female breast lumps or hard nodules, pain extending over the breast on nursing.

Phytolacca is to be thought of for females who have a tendency to get fat and who are subject to glandular enlargements, especially of the neck and of the breast.

QUININE SULPHATE.

Dose.—From 1 to 20 grains; usual dose, 3 to 10 grains.

Quinine in large doses or in small oft repeated doses causes a fullness of the head, with ringing in the ears and deafness or poor hearing. Quinine congests the head and middle ear and would be contraindicated in any affection where there is an excess of blood to the head or ear. Small doses of Quinine stimulate the digestion, and what is not absorbed in the stomach passes on into the intestines and acts as an antiseptic there. For the antiseptic action in the intestines Quinine is much prescribed in typhoid fever. For diarrhœa of the amœbic variety, or army diarrhœa or bloody flux, much benefit may be derived from washing out the lower bowel with a solution of from 7 to 15 grains to the pint of boiled water. Quinine is often given in 2 or 3 grain doses after meals as a general tonic for a run down condition of the system. Quinine has an action in the blood to destroy the germs of malaria. Ten grain doses for two or three doses an hour apart before the time of the expected chill in malaria will often avert the chill. In the course of one morning in malaria it is best not to exceed 20 or 25 grains of Quinine as the aggregate amount of the drug given.

In the early stage of labor, when the pains are irregular and weak, 10 grains of Quinine and three or four teaspoonfuls of whisky will often hasten regular and firm labor pains.

Some people cannot take Quinine, and even small doses will produce a red rash of the skin, much resembling scarlet fever or of hives or of ivy poison. To such persons Quinine should not be given.

### TINCTURE OF STROPHANTHUS.

Dose.—Tr. Strophanthus, 1 to 3 drops morning and evening.

Strophanthus has not the culminative action of Digitalis, does not act on the nerves of the heart and arteries as does Digitalis. Strophanthus acts directly on the heart muscle itself and the muscular walls of the blood vessels. For this reason Strophanthus is a prime remedy where there is failing of the heart or arteries. Digitalis again is best where there is a disturbance of function and little real impairment of the heart or blood vessels themselves. Strophanthus slows the heart and increases the force of the heart's action, increases the flow of urine by direct stimulation of the circulation in the kidney.

The indications calling for the drug are a weak heart, scant urination, blue lips, dizziness or faintness associated with palpitation and shortness of breath on exertion.

### EPSOM SALTS.

DOSE.—1 to 8 teaspoonfuls, given well diluted in water.

Epsom Salts causes the intestinal mucous membrane to give off a great amount of fluid, prevents the absorption of the fluid from the food and causes a movement in much the same manner as an enema. The distension of the intestine with fluid encourages the action of the muscles of the intestines and a movement is produced. Where there is constipation and an accumulation of hardened fæces in the intestines Epsom Salts should be given first choice, as it increases the fluid of the bowel and assists thus in getting rid of any hardened masses.

In chronic lead poisoning Epsom Salts relieves the constipation and combines with the lead to form a non-poisonous compound. In Carbolic Acid poisoning Epsom Salts acts much the same as in lead poison, by moving the bowels and combining with the acid to form a non-poisonous substance. In poison cases, after the bowels have been moved, give salts in small doses three or four times a day.

To produce catharsis dissolve the salts in a half glass of water and drink at one draught, best before breakfast. If nausea is produced, add 3 grains of the Carbonate of Magnesia to each drachm of salts used. Epsom Salts is

not a good remedy for the atony of the bowel and constipation of elderly people.

### SUPPOSITORIES.

Suppositories produce much the same result and are given for the same purposes as enemata. Suppositories may be medicated or non-medicated. They are usually oblong and made of some substance that, though firm enough to handle, readily melts from the heat of the body. By their action they stimulate the bowels to move. If medicated they are used as a vehicle to carry the medicine to the part. Cacao butter is the chief ingredient of laxative suppositories; pure and of itself it acts much the same as an enemata of water, moving the bowels in about 15 minutes to a half hour. Glycerine suppositories are much used to cause evacuation of the bowels. Small suppositories are very useful to cause movement in infants and small children. Medicated suppositories are given according to the directions of a physician. To give a suppository have the patient, as in enemata, lie down on the left side, and as the nozzel of the syringe should be introduced, so also should the suppository, upward, backward and slightly to the left. Never use any force.

### SODII SALICYLIC, SALICYLATE OF SODIUM.

The pure drug is found in small, white crys-

talline powder, odorless and having a sweetish, salty taste. The chief use of the drug is to alleviate the pain and inflammation of rheumatism.

One dose is 15 grains, three times a day.

### STRAMONIUM (HOMŒOPATHIC).

DOSE.—$\theta$ to 6x, from 2 to 3 tablets every three to six hours.

INDICATIONS FOR STRAMONIUM.—Delirium, very talkative, sees objects coming from the corners of the room, animals spring up before the eyes, laughs, sings and dances, fears the dark, wants light and company, imagines all sorts of things, sparkling, staring eyes, with dilated pupils; imagines evil is coming to him or is being planned about him, grinds the teeth, does not want water, food tastes unnatural, sleepy, but cannot sleep.

Stramonium is the prime remedy for overwrought nerves, for excessive nervousness, with great imaginings and sleeplessness; is one of the best remedies for acute mania or insanity. For some of the acute deliriums of the fevers. In mental derangement look up Belladonna, Hyoscyamus and Stramonium.

### SILICEA (HOMŒOPATHIC).

DOSE.—6x to 10x, 1 tablet three times a day.

INDICATIONS FOR SILICEA.—Great sensitiveness to noise, poorly nourished, child cries if

spoken to, pain in the neck, extending up over the head to the forehead; worse on the right side, better from warmth, pustular eruption of the eyelids, with burning and smarting; middle ear disease, ulcers in the nose, abscess at root of the teeth, ulcers on the tonsils, bitter taste in the mouth, constipation, scant urination, with yellow sediment; pain in the joints of the feet, intense pain in the joints of the next to the little toe when wearing shoe, offensive perspiration of the feet.

Silicea is a prime remedy for suppurating conditions where wounds heal poorly, deranged condition of the skin where every scratch develops into a sore. For nervous scrofulous subjects, with swelling of the glands of the neck, axilla, breast and groin; for styes and purulent eye troubles, purulent discharges from the ears, ulcers of the throat that do not heal, felons and suppurative bone diseases.

### SULPHUR.

Dose.—Sublimed Sulphur, 5 to 120 grains.

Sulphur is said to purify the blood and has been used for this purpose for many years. Given in molasses, one to two teaspoonfuls may be given daily until the bowels move freely.

For rheumatism of the joints 10 to 15 grains three times a day has often proven beneficial.

Locally Sulphur is a valuable remedy for

skin diseases where redness and swelling are absent.

For the itch and for ringworm two teaspoonfuls of Sulphur to eight teaspoonfuls of lard makes a very reliable remedy. Rub in well once a day for a week and then take a bath for the first time during the week of treatment.

### SULPHUR (HOMŒOPATHIC).

DOSE.—1x to 6x, 3 tablets three or four times a day.

INDICATIONS FOR SULPHUR.—Dizziness when sitting, heat on top of the head, fullness of the forehead, throbbing headache in the morning, large opening on the top of the head in babes that closes late, light sleep, dullness of thought, forgets words, inclined to be sorrowful and ill-natured, intolerance of light, black spots before the eyes, eyes burn, roaring whizzing in the ears, nose bleed, blisters on the nose, discharge from the nose that burns and makes the nose raw, eruptions on the face, and in the hair, a dirty greasy appearance of the skin, putrid taste in the mouth, feeling as if there were a lump in the throat, sore swollen glands, intense hunger in the morning and at times must get out of bed because of the hunger, to satisfy the gone, empty feeling in the stomach.

Desire for sweets, but sweets cause intense heartburn, soreness in the region of the liver and stomach.

Diarrhœa early in the morning that compels the patient to get out of bed, constipation and diarrhœa alternate, uncertainty of the abdomen and an unsatisfied feeling after a movement. Burning of the anus after a movement. Frequent urination of offensive urine, burning of the urinary passage during urination, pain and rattling in the chest, dry cough excited by talking, stitches in the chest. Mucopurulent expectoration, dry, unhealthy skin, every injury becomes a sore, pimples of the skin, long lasting ulcers.

Sulphur is to be thought of in dry harsh skin diseases, in a greasy condition of the face with black heads or comedones, for pimples and blotches of the face, in goneness of the stomach with hunger that must be satisfied, in diarrhœa that gets the patient out of bed every morning, in glandular diseases with a tendency to the formation of abscesses, where all the discharges of the body burn and excoriate the surfaces over which they flow.

### SEPIA SUCCUS (HOMŒOPATHIC.)

Dose.—2x to 6x, from 2 to 3 tablets 3 times a day.

Indications for Sepia.—Violent headache in the evening, dizziness when walking in the open air, one-sided headache with nausea and sadness, weakness of memory and an inability to think, does not care for friends or relatives,

sleepy in the day and wakeful at night, black spots before the eyes, watery discharge from the ear, sore nose, dryness of the nose with obstruction to breathing, yellowness of the face and marked yellowness of the bridge of the nose, toothache worse from hot or cold drinks or food, aversion to food and everything tastes salty, emptiness of the stomach and a feeling as if food must be taken to satisfy the empty feeling, constipated, hard, difficult stool, the urine is offensive and there is a tendency to wet the bed before the patient is aroused from sleep, clay-like or red sand-like deposit in the urinal after the urine has been left standing for a while, cough in the morning, tickling in the throat exciting cough.

In women, there may be the greatest variety of change from the time and nature of the flow. The flow is not normal in nature or time, and with this change there are many other nervous sensations or disturbances throughout the system, watery leucorrhœa, a sensation as if the womb would protrude and the patient sits with the legs crossed to overcome this feeling, toothache during pregnancy, itching of the genitals, with a milky discharge during pregnancy, and there is apt to be pain in the shoulder and joints of the arms, and heaviness of the limbs during pregnancy.

Sepia is a good remedy where the flow is deranged in time or nature and for the many

nervous phenomena of the change of life and for the nervous disorders of pregnancy.

### TEREBINTHINA, OIL OF TURPENTINE.

DOSE.—Five to 20 drops on sugar.

Internally, Turpentine causes a warmth of the stomach. Acts as an antiseptic in the stomach and bowels, and is used with Castor Oil for the destruction of tape-worm. Four teaspoonfuls to 1½ ounces of Castor Oil is thus employed. Turpentine increases the flow of urine. On the lungs Turpentine acts as a mild expectorant.

Colic with distension of the stomach and bowels may be relieved by an injection of 6 teaspoonfuls to a pint of soapy water. For painful joints, pain in the back or pain of the chest and colic, wring out a cloth from hot water and sprinkle on it a few drops of Turpentine and apply to the painful part.

Turpentine, Water of Ammonia and Olive Oil in equal parts make a very good liniment.

### THUJA OCCIDENTALIS (HOMŒOPATHIC).

DOSE.—2x to 6x, 1 tablet three times a day.

INDICATIONS FOR THUJA.—Always in a hurry, in moving and in every act. Feels as if his body was scattered about the bed, or was double, or made of glass. Sharp stabbing pain in the head. Diarrhœa. Burning and scalding of urinary tract as from hot water. Warts on

the genitals. Thuja is a good remedy for dry, fissured warts of the skin. Warts of the mucous membrane. Rheumatic affections of the joints associated with warty growths of the skin and mucous membranes.

### TARTARUS EMETICUS, TARTAR EMETIC (HOMŒOPATHIC).

DOSE.—3x to 6x, from 1 to 2 tablets three times a day.

INDICATIONS FOR TARTAR EMETIC.—Confusion of the mind. Throbbing headache, bad humor. Dimness of vision. Flickering and streaks of light before the eyes. Running of the nose. Pale face. Red, streaked tongue. Flat taste in the mouth. Sore throat. Nausea or vomiting. Pain in the stomach. Diarrhœa. Dark, cloudy urine. Difficult breathing. Fine rattling in the chest. Coughing with vomiting, but little expectoration. Eruptions on the skin and mucous membranes.

Tartar emetic is a good remedy for croup. For rattling in the chest with vomiting, but little expectoration. For pustular skin eruptions with complications of the chest.

### VERATRUM VIRIDE.

DOSE.—Two to 6 drops of Tr. Veratrum viride. Do not exceed 20 drops in a half day.

Veratrum viride depresses the nerve centres. Slows the pulse and lowers the blood

pressure throughout the arteries. In childbed convulsions Veratrum viride slows and softens the pulse, relieves the brain of congestion and quiets the irritability of the nerves. Give 5 drops and repeat in 15 minutes until the pulse becomes slower and softer. Reduce the pulse to about 60 per minute, but do not give more than is required to reduce the pulse thus far.

### VAGINAL INJECTION.

Vaginal injections are, as a rule, not needed in health, but their utility in disease makes the subject of import. Douches are of use to restore the flow when from some cause it has stopped too soon, and also to carry antiseptics and medical agents to the female genital tract. A vaginal douche to be of any service must be given in the recumbent posture, and be given slowly. Injections to restore the flow should be hot, not less than 110 degrees Fahrenheit. Medicated and antiseptic injections are given in diseases of the female genital tract, and as a cleansing douche after confinement. The size and nature of such a douche will be indicated under the head of those respective conditions. To give a douche the patient should lie on the back, the knees flexed, and the hips slightly elevated; give as directed for the effect desired.

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## ERRATA IN THE MEDICAL HANDBOOK.

Page 83, MORNING SICKNESS, 5th line, change "*of*" to "*into.*"

Page 89, FLOODING, last line, 1st word, "*kneading*" *to* "*kneaded.*"

Page 99, PARASITIC (3), third word, "*from*" to "*of*"; 5th line, 1st word, "*the*" to "*a.*" TREATMENT, 2d line, strike out "*and,*" insert "*on*" after the word applying.

Page 104, MENOPAUSE, 1st line, 2d word, "*sensation*" to "*cessation.*"

Page 114, strike out the heading "**PLEURISY**" and connect the text with that of page 113 with no heading; begin "*Pleurisy similates*" (not *stimulates*).

Page 132, in middle of page strike out the heading "**QUINSY.**"

Page 168, 7th line from the bottom, "*derness*" to "*redness.*"

Page 173, 1st line, second "*and*" to "*by.*"

Page 177, 4th line from the bottom, last word, "*injected*" to "*ingested.*"

Page 230, 6th line from the top, 1st word, "*injected*" to "*ingested.*"

The author must beg lenience for these and other errors of grammar or spelling. Having to leave again for Alaska before the proof could be read, many of the errors passed the eye of the printer that would not have occurred in a second proof reading.